

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Chevron Phillips Chemical Company, LP

AUTHORIZING THE OPERATION OF
Polyethylene Units 40 And 41
All Other Basic Organic Chemical Manufacturing

LOCATED AT
Brazoria County, Texas
Latitude 29° 4' 30" Longitude 95° 44' 48"
Regulated Entity Number: RN100825249

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O3961 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1130 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. Emission units subject to 40 CFR Part 63, Subpart A as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.100 which incorporates the 40 CFR Part 63 Subpart by reference.
- G. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- H. Emission units subject to 40 CFR Part 63, Subpart FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.890 which incorporates the 40 CFR Part 63 Subpart by reference.
- I. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.302 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
 - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- J. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
 - (i) Title 30 TAC § 101.352 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
 - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
 - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
 - (v) Title 30 TAC § 101.359 (relating to Reporting)
 - (vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- K. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
 - L. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 6 (Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program) requirements:
 - (i) Title 30 TAC § 101.392 (relating to Exemptions)
 - (ii) Title 30 TAC § 101.401 (relating to Level of Activity Certification)
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A,

Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance

from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- E. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

- (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- F. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:
 - A. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
 - (iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)
 - (iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
 - (v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
 - (vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
 - (vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
 - (viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)
 - (ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

- (x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
 - (xi) Title 30 TAC § 115.545(1) - (11) and (13) (relating to Approved Test Methods)
 - (xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
 - (xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
 - (xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
 - (xv) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification
6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
8. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

Additional Monitoring Requirements

9. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

- A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:
 - (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or
 - (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.
 - F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
15. The permit holder shall adhere to the provisions in the Compliance Schedule attachment of this permit and submit certified progress reports consistent with the schedule established under 30 TAC § 122.132(d)(4)(C) and including the information specified in 30 TAC § 122.142(d)(2). Those emission units listed in the Compliance Schedule attachment shall adhere with the requirements in the Compliance Schedule attachment until operating fully in compliance with the applicable requirements.
16. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

(1) Title 30 TAC § 117.9020(2)(D)

- B. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

17. Use of Emission Credits to comply with applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
- (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
- B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

18. Use of Discrete Emission Credits to comply with the applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
- (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

- 19. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

- 20. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Alternative Requirements

- 21. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator and TCEQ Executive Director, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

- 22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

23. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Schedules

Alternative Requirement

Applicable Requirements Summary

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
40-25-6300	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-25-6301	EMISSION POINTS/STATIONARY	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
40-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-35-1014	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					concentration is greater than or equal to 612 ppmv.
40-35-1014	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-35-1114	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
40-35-1114	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
40-36-1013	PROCESS HEATERS/FURNACES	N/A	R7300-002	30 TAC Chapter 117, Subchapter B	No changing attributes.
40-36-1013	PROCESS HEATERS/FURNACES	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
40-36-1113	PROCESS HEATERS/FURNACES	N/A	R7300-002	30 TAC Chapter 117, Subchapter B	No changing attributes.
40-36-1113	PROCESS HEATERS/FURNACES	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
41-25-6301	EMISSION	N/A	R5121-1	30 TAC Chapter 115, Vent	Vent Type = Title 30 TAC Chapter

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			Gas Controls	115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
41-25-6301	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
42-05-9201	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-296	30 TAC Chapter 115, HRVOC Cooling Towers	No changing attributes.
42-95-0421	STORAGE TANKS/VESSELS	N/A	R5112-79	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
42-95-0421	STORAGE	N/A	60Kb-32	40 CFR Part 60, Subpart Kb	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS				
42-95-0422	STORAGE TANKS/VESSELS	N/A	R5112-79	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
42-95-0422	STORAGE TANKS/VESSELS	N/A	60Kb-33	40 CFR Part 60, Subpart Kb	No changing attributes.
42-97-9610	FLARES	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
42-97-9610	FLARES	N/A	R5720-145	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
42-97-9610	FLARES	N/A	63A-1	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Steam assisted, Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
42-97-9610	FLARES	N/A	63A-2	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(i).
42-97-9610	FLARES	N/A	63A-3	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Steam assisted, Flare Exit Velocity

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					= Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
42-97-9610	FLARES	N/A	63A-4	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
42-97-9610	FLARES	N/A	63A-5	40 CFR Part 63, Subpart A	Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8)., Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
42-97-9620	INCINERATOR	N/A	R7301-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
42-97-9820	VOLATILE ORGANIC	N/A	R5131-1	30 TAC Chapter 115, Water	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	COMPOUND WATER SEPARATORS			Separation	
87-97-1510	SRIC ENGINES	N/A	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
87-97-1510	SRIC ENGINES	N/A	60III-2	40 CFR Part 60, Subpart IIII	No changing attributes.
87-97-1510	SRIC ENGINES	N/A	63ZZZZ-2	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	R5780-ALL	30 TAC Chapter 115, HRVOC Fugitive Emissions	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	60DDD-ALL	40 CFR Part 60, Subpart DDD	No changing attributes.
FUG-01	FUGITIVE EMISSION UNITS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
GRPDEGREAS	SOLVENT DEGREASING MACHINES	DG-01, DG-02, DG- 03	R5412-001	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	60III-1	40 CFR Part 60, Subpart IIII	No changing attributes.
GRPEMG-ENG	SRIC ENGINES	EMG-ENG1, EMG- ENG2, EMG-ENG3	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPENGTK	STORAGE TANKS/VESSELS	EMG-ENGTK1, EMG-ENGTK2, EMG-ENGTK3, FWP-TK1	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPVENT40ATM	EMISSION	40-35-6106, 40-35-	R5721-1	30 TAC Chapter 115,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS	6201, 40-35-8011, 40-35-8021		HRVOC Vent Gas	
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-8011, 40-35-8021	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-8011, 40-35-8021	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-8011, 40-35-8021	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
GRPVENT40ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	40-35-6106, 40-35- 6201, 40-35-8011, 40-35-8021	63FFFF-3	40 CFR Part 63, Subpart FFFF	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35- 6201, 41-35-8011, 41-35-8021	R5721-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35- 6201, 41-35-8011, 41-35-8021	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35- 6201, 41-35-8011, 41-35-8021	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
GRPVENT41ATM	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	41-35-6106, 41-35- 6201, 41-35-8011, 41-35-8021	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
GRPVENT41ATM	EMISSION POINTS/STATIONARY	41-35-6106, 41-35- 6201, 41-35-8011,	63FFFF-3	40 CFR Part 63, Subpart FFFF	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS	41-35-8021			
PRODDDATM	POLYMER MANUFACTURING PROCESSES	N/A	60DDD-1	40 CFR Part 60, Subpart DDD	No changing attributes.
PROUNIT40	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROUNIT41	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
TK-01	STORAGE TANKS/VESSELS	N/A	R5112-3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
UNLOAD1	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
UNLOAD1	LOADING/UNLOADING OPERATIONS	N/A	R5211-2	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-2	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-4	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate control is not used., Control Device Type = Smokeless flare
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-5	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
VENT40FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
VENT40VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
VENT40VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-2	40 CFR Part 63, Subpart FFFF	No changing attributes.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5721-2	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-4	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate control is not used., Control Device Type = Smokeless

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					flare
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-5	30 TAC Chapter 115, Vent Gas Controls	Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
VENT41FL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
VENT41VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
VENT41VDU	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-2	40 CFR Part 63, Subpart FFFF	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
40-25-6300	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
40-25-6300	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
40-25-6300	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.			
40-25-6300	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-25-6301	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
40-25-6301	EP	R5121	VOC	30 TAC	§ 115.127(a)(2)(A)	A vent gas stream	[G]§ 115.125	§ 115.126	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		-1		Chapter 115, Vent Gas Controls	[G]§ 115.122(a)(4) § 115.127(a)(2)	having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	§ 115.126(2) § 115.126(3)(B)	§ 115.126(2) § 115.126(3) § 115.126(3)(B)	
40-25-6301	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
40-25-6301	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-35-1014	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						continuous 24-hour period is exempt from §115.121(a)(1) of this title.			
40-35-1014	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-35-1114	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
40-35-1114	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
40-36-1013	EU	R7300-002	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b)	An owner or operator may not use the alternative methods specified in §§ 117.315,	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)		[G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
40-36-1013	EU	R7300-002	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
40-36-1013	EU	63DD DDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation,	The permit holder shall comply with the applicable requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable monitoring and testing	The permit holder shall comply with the applicable recordkeeping	The permit holder shall comply with the applicable reporting requirements of 40 CFR

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	Subpart DDDDD	requirements of 40 CFR Part 63, Subpart DDDDD	requirements of 40 CFR Part 63, Subpart DDDDD	Part 63, Subpart DDDDD
40-36-1113	EU	R7300-002	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
40-36-1113	EU	R7300-002	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)		[G]§ 117.8010(7) [G]§ 117.8010(8)
40-36-1113	EU	63DD DDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
41-25-6301	EP	R5721 -1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
41-25-6301	EP	R5121 -1	VOC	30 TAC Chapter 115, Vent Gas	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls		compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.		§ 115.126(3)(B)	
41-25-6301	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
41-25-6301	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
42-05-9201	EU	R5760-296	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.767(6) § 115.764(a)(1) § 115.766(i)	All sites that are subject to this division and that are located in the Houston/ Galveston/Brazoria area as defined in § 115.10, excluding Harris County, are exempt from §	§ 115.764(a)(1) § 115.764(a)(3) § 115.764(c) § 115.764(d)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(4) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) § 115.766(d)	§ 115.766(i)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						115.761(b) and (c)(2), except as provided in § 115.769(a)(3).		§ 115.766(i)(1)	
42-95-0421	EU	R5112-79	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
42-95-0421	EU	60Kb-32	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) [G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)
42-95-0422	EU	R5112-79	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.114(a)(1)(A)	loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
42-95-0422	EU	60Kb-33	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
42-97-9610	CD	R1111-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
42-97-9610	EP	R5720-145	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(10) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B) [G]§ 115.726(a)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B) [G]§ 115.726(a)(2)		§ 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5) § 115.725(d)(6) § 115.725(d)(7) § 115.725(k)(1) [G]§ 115.725(l) § 115.725(m)(1) § 115.725(m)(2)(A) § 115.725(m)(2)(B) § 115.725(n) **See Alternative Requirements		
42-97-9610	CD	63A-1	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) **See Alternative Requirements	None	None
42-97-9610	CD	63A-2	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(i)(A) § 63.11(b)(6)(i)(B) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) **See Alternative Requirements	None	None
42-97-9610	CD	63A-3	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) **See Alternative Requirements	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11(b)(7)(ii)	Test Method 22 in App. A of part 60 of this chapter shall be used.			
42-97-9610	CD	63A-4	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) **See Alternative Requirements	None	None
42-97-9610	CD	63A-5	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) **See Alternative Requirements	None	None
42-97-9620	EU	R7301-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) [G]§ 117.310(a)(16) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(8) § 117.8100(c)
42-97-9820	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
87-97-1510	EU	R7300-1	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations;	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
87-97-1510	EU	60III-2	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
87-97-1510	EU	60III-2	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
87-97-1510	EU	63ZZZ Z-2	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(iii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1)	All pumps that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.787(g)				
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	All compressors that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(d) § 115.780(b) [G]§ 115.781(a) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)	All agitators that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.781(b) and (c). Submerged pumps or sealless pumps may be used to satisfy the requirements of this subsection.	§ 115.782(d)(2)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1) § 115.787(g)				
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) [G]§ 115.781(d) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(1) § 115.783(1)(A) § 115.783(1)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3)	Bypass line valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) [G]§ 115.781(d) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.786(a)(1)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) § 115.786(a)(1) § 115.786(a)(2) § 115.786(a)(2)(A) § 115.786(a)(2)(B) § 115.786(b)(1) § 115.786(b)(2) § 115.786(b)(2)(A) § 115.786(b)(2)(B) § 115.786(b)(2)(C) [G]§ 115.786(b)(3) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)				
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(iii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, and covers and seals on VOC water separators within the process unit or processes listed in §115.780(a) in which a HRVOC is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(a)	Components that contact a process fluid containing less than 5.0% highly-reactive volatile organic compounds by weight on an annual average basis are exempt from the requirements of this division (relating to Fugitive Emissions), except for 115.786(e) and (g) of this title (relating to Record	None	§ 115.786(e) § 115.786(g)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						keeping Requirements).			
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(iii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.783(4)(A)(i) § 115.783(4)(A)(ii) § 115.783(4)(A)(ii)(I) § 115.783(4)(A)(ii)(II) § 115.783(4)(B) § 115.783(4)(B)(i) § 115.783(4)(B)(ii)	Process drains within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(5) § 115.781(b)(6) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.787(e)	Pressure relief valves (in gaseous service) within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(b)(8) § 115.781(e)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.787(f) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	[G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii)	Valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)				
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Flanges or other connectors within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1)	Compressor seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(iii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b) § 115.787(b)(1)	Pump seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	Agitators within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)
FUG-01	EU	R5780 -ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.358(c)(1) [G]§ 115.358(h) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(2) § 115.782(b)(3) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Components within the process unit or processes listed in §115.780(a) is subject to the requirements of this division. If the owner of operator elects to use the alternative work practice in §115.358 of this title, a leak is defined as specified in §115.358 of this title, including any leak detected using the alternative work practice on a component that is	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f) § 115.781(b)	§ 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(4) § 115.356(5) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i)	[G]§ 115.358(g) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(h)(1) § 115.781(h)(2) § 115.781(h)(3) § 115.781(h)(4) § 115.781(h)(5) [G]§ 115.781(h)(6) § 115.782(b)(4) § 115.782(d)(1) § 115.788(h)(1) [G]§ 115.788(h)(2) § 115.788(h)(3)	[G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) [G]§ 115.786(f) § 115.786(g)	
FUG-01	EU	R5780-ALL	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(2) § 115.787(f)(3) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A)	Open-ended valves or lines within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g) § 115.789(1)(B)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)		§ 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)		
FUG-01	EU	R5352 -ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352 -ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9)	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and §115.356(3)(C).			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(7)	screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery &	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No open-ended valves or lines shall be allowed to have a VOC leak, for	§ 115.354(1) § 115.354(2) § 115.354(5)	§ 115.352(7) § 115.356 [G]§ 115.356(1)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Petrochemicals	§ 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						fluid based on sight, smell, or sound.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.			
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
FUG-01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-2 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	[G]§ 60.482-2 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-3 [G]§ 60.482-9 § 60.562-2(d)	Comply with the requirements as stated in §60.482-3 for compressors.	[G]§ 60.482-3 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.562-2(e)			[G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-4 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	[G]§ 60.482-4 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-5 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-6 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-7 [G]§ 60.482-9 [G]§ 60.483-1 [G]§ 60.483-2 § 60.562-2(b) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service.	[G]§ 60.482-7 [G]§ 60.483-1 [G]§ 60.483-2 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(d) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b)	Comply with the requirements in as stated in §60.482-8 for	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.482-8 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	pumps in heavy-liquid service.	[G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for valves in heavy-liquid service.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid service.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9 § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-8 for flanges or other connectors.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.565(l)
FUG-01	EU	60DD D-ALL	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service.	None	§ 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	§ 60.562-2(e)
FUG-01	EU	63FFF F-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					Part 63, Subpart FFFF				
GRPDEGREAS	EU	R5412-001	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F)	No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F), except as exempted in §115.411.	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
GRPEMG-ENG	EU	R7300-1	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRPEMG-ENG	EU	60III-1	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(f) § 60.4218 § 89.112(a)	130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
GRPEMG-ENG	EU	60IIII-1	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRPEMG-ENG	EU	60IIII-1	PM (Opacity)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).			
GRPEMG-ENG	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRPEMG-ENG	EU	63ZZZ Z-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of	None	None	§ 63.6645(c) § 63.6645(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§63.6645(f).			
GRPENGTK	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPVENT40ATM	EP	R5721-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
GRPVENT40ATM	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title.			
GRPVENT40ATM	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None
GRPVENT40ATM	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
GRPVENT40ATM	EP	63FFF F-3	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) § 63.115(d)(3)(i) § 63.115(d)(3)(ii)	None	None
GRPVENT41ATM	EP	R5721	Highly	30 TAC	§ 115.727(c)(2)	A vent gas stream that	None	§ 115.726(e)(3)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		-1	Reactive VOC	Chapter 115, HRVOC Vent Gas		has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.		§ 115.726(j)(2)	
GRPVENT41ATM	EP	R5121 -1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
GRPVENT41ATM	EP	R5121 -2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(1) [G]§ 115.122(a)(4)	A vent gas stream from a low-density polyethylene plant is exempt from §115.121(a)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the	[G]§ 115.125 § 115.126(2) § 115.126(3)(A)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						vent gas streams associated with the formation, handling, and storage of solidified product.			
GRPVENT41ATM	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
GRPVENT41ATM	EP	63FFF F-3	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) § 63.115(d)(3)(i) § 63.115(d)(3)(ii)	None	None
PRODDDATM	PRO	60DD D-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7)
PROUNIT40	PRO	63FFF F-1	112(B) HAPS	40 CFR Part 63, Subpart	§ 63.2440(a) § 63.2450(a)	This subpart applies to each miscellaneous	§ 63.2445(d)	§ 63.2525 § 63.2525(a)	§ 63.2435(d) § 63.2445(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				FFFF	§ 63.2450(l)	organic chemical manufacturing affected source.		[G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PROUNIT41	PRO	63FFF F-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
TK-01	EU	R5112-3	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
UNLOAD1	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
UNLOAD1	EU	R5211-2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
VENT40FL	EP	R5721-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent	§ 115.727(f) § 115.722(d) § 115.722(d)(1)	All sites that are subject to this division and that are located in the	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Gas	§ 115.722(d)(2)	Houston/Galveston/ Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).		§ 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	
VENT40FL	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary **See Alternative Requirement	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
VENT40FL	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
VENT40FL	EP	63FFF F-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
VENT40VDU	EP	R5121 -6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2)	None
VENT40VDU	EP	63FFF F-2	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2)	§ 63.2450(q) § 63.995(b) § 63.995(c) § 63.996(b)(2) § 63.996(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.995(a)(1) § 63.995(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) [G]§ 63.997(d)	greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.995(b) § 63.995(c) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)	§ 63.995(b) § 63.995(c) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)
VENT41FL	EP	R5721-2	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(f) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	All sites that are subject to this division and that are located in the Houston/Galveston/	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						Brazoria area as defined in §115.10 of this title (relating to Definitions), excluding Harris County, are exempt from § 115.722(b) and (c)(2) of this title, except as provided in § 115.729(a)(3) of this title (relating to Counties and Compliance Schedules).		§ 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	
VENT41FL	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary **See Alternative Requirement	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
VENT41FL	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
VENT41FL	EP	63FFF F-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3)	For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare.	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii)	§ 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2)
VENT41VDU	EP	R5121 -6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(iii) § 115.126(2)	None
VENT41VDU	EP	63FFF F-2	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a)	For each Group 1 continuous process vent, the owner or operator must reduce emissions	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b)	§ 63.2450(q) § 63.995(b) § 63.995(c) § 63.996(b)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.995(a)(1) § 63.995(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) [G]§ 63.997(d)	of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	§ 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.995(b) § 63.995(c) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(iii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)	[G]§ 63.983(d)(2) § 63.995(b) § 63.995(c) § 63.996(c)(2)(iii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.996(c)(6) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: VENT40FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-4
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot flame.	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-5
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot flame.	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT40VDU	
Control Device ID No.: 42-97-9620	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-6
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: At all times waste gas is directed to the VDU, as indicated by the flow monitor	
Averaging Period: N/A	
Deviation Limit: No Pilot Flame	
<p>CAM Text: Calibrated to or have a calibration check per manufacturer's specifications</p> <p>Retain records of date, time and duration of waste gas vent stream flow. Time, date, and duration of any loss of pilot flame while waste gas is directed to the VDU shall be recorded.</p> <p>The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-4
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot flame	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41FL	
Control Device ID No.: 42-97-9610	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-5
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: VENT41VDU	
Control Device ID No.: 42-97-9620	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-6
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: At all times waste gas is directed to the VDU, as indicated by the flow monitor	
Averaging Period: N/A	
Deviation Limit: No Pilot Flame	
<p>CAM Text: Calibrated to or have a calibration check per manufacturer's specifications</p> <p>Retain records of date, time and duration of waste gas vent stream flow. Time, date, and duration of any loss of pilot flame while waste gas is directed to the VDU shall be recorded.</p> <p>The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPDEGREAS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-001
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Cover shall be kept closed whenever cleaner is not in use, and any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
40-35-1014	N/A	30 TAC Chapter 115, HRVOC Vent Gas	Vent stream does not emit highly reactive volatile organic compounds.
40-35-1014	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of transfer rack; does not fill tank trucks and/or rail cars with organic liquids that contain one or more HAPs.
40-35-1114	N/A	30 TAC Chapter 115, HRVOC Vent Gas	Vent stream does not emit highly reactive volatile organic compounds.
40-35-1114	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of continuous process vent for purposes of 40 CFR 63 Subpart FFFF applicability; does not emit organic HAPs
42-05-9201	N/A	40 CFR Part 63, Subpart FFFF	MACT FFFF heat exchange system requirements do not apply because unit meets the condition in §63.104(a)(5): the recirculating heat exchange system is used to cool process fluids that contain less than 5% by weight of total hazardous air pollutants
42-05-9201	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used compounds containing chromium on or after September 8, 1994.
42-95-0421	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of storage tank in MACT FFFF; stores organic liquids that contain HAPs only as impurities.
42-95-0422	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of storage tank in MACT FFFF; stores organic liquids that contain HAPs only as impurities.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
42-97-9820	N/A	40 CFR Part 63, Subpart FFFF	Wastewater stream does not meet the definition of process wastewater in Subpart F and in §63.2485(b)-not Group 1 wastewater.
FUG-01	N/A	40 CFR Part 60, Subpart VVa	Not an affected facility in the synthetic organic manufacturing industry; does not produce, as intermediate or final product, one of the chemicals listed in §60.489.
GRPDEGREAS	DG-01, DG-02, DG-03	40 CFR Part 63, Subpart T	Cold solvent cleaner does not use halogenated HAP solvents.
GRPENGTK	EMG-ENGTK1, EMG-ENGTK2, EMG-ENGTK3, FWP-TK1	40 CFR Part 60, Subpart Kb	Tank is less than 10,600 gallons.
GRPVENT40ATM	40-35-6106, 40-35-6201, 40-35-8011, 40-35-8021	40 CFR Part 60, Subpart NNN	Not part of a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product or intermediate.
GRPVENT40ATM	40-35-6106, 40-35-6201, 40-35-8011, 40-35-8021	40 CFR Part 60, Subpart RRR	Not part of a process unit that produces any of the chemicals listed in §60.707 as a product, co-product, by-product or intermediate.
GRPVENT41ATM	41-35-6106, 41-35-6201, 41-35-8011, 41-35-8021	40 CFR Part 60, Subpart NNN	Not part of a process unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product or intermediate.
GRPVENT41ATM	41-35-6106, 41-35-6201, 41-35-8011, 41-35-8021	40 CFR Part 60, Subpart RRR	Not part of a process unit that produces any of the chemicals listed in §60.707 as a product, co-product, by-product or intermediate.
GRPVENTNOVOC	40-35-3102, 40-35-6105, 40-35-6181, 40-35-6191, 40-35-61AF, 40-35-6310, 40-35-6401, 40-35-	30 TAC Chapter 115, Vent Gas Controls	Vent stream does not emit volatile organic compounds.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
	8103, 40-35-8120, 40-35-8130, 41-35-3102, 41-35-6105, 41-35-61AD, 41-35-6401, 87-35-3120		
GRPVENTNOVOC	40-35-3102, 40-35-6105, 40-35-6181, 40-35-6191, 40-35-61AF, 40-35-6310, 40-35-6401, 40-35-8103, 40-35-8120, 40-35-8130, 41-35-3102, 41-35-6105, 41-35-61AD, 41-35-6401, 87-35-3120	40 CFR Part 63, Subpart FFFF	Does not meet the definition of continuous process vent for purposes of 40 CFR 63, Subpart FFFF applicability; does not emit HAPs.
PROUNIT40	N/A	30 TAC Chapter 115, Industrial Wastewater	Not an affected VOC wastewater stream; VOC concentration less than 1000 ppmw.
PROUNIT41	N/A	30 TAC Chapter 115, Industrial Wastewater	Not an affected VOC wastewater stream; VOC concentration less than 1000 ppmw.
TK-01	N/A	40 CFR Part 60, Subpart Kb	Tank between 20,000 and 40,000 gallons storing VOL with a vapor pressure less than 2.2 psia.
UNLOAD1	N/A	40 CFR Part 63, Subpart FFFF	Does not meet the definition of transfer rack; does not fill tank trucks and/or rail cars with organic liquids that contain one or more HAPs.

New Source Review Authorization References

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New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Nonattainment (NA) Permits	
NA Permit No.: N166M1	Issuance Date: 10/25/2018
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 103832	Issuance Date: 10/25/2018
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.263	Version No./Date: 11/01/2001

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
40-25-6300	UNIT 40 PELLET DEWATERING DRYER	103832, N166M1
40-25-6301	UNIT 40 PELLET DEWATERING DRYER	103832, N166M1
40-35-1014	UNIT 40 HEPA ACTIVATOR FILTER A/B	103832, N166M1
40-35-1114	UNIT 41 HEPA ACTIVATOR FILTER A/B	103832, N166M1
40-35-3102	UNIT 40 S-1 CATALYST CHARGE PURGE FILTER	103832, N166M1
40-35-6105	UNIT 40 ADDITIVE BAG DISCHARGE FILTER	103832, N166M1
40-35-6106	UNIT 40 EXTRUDER FEED HOPPER VENT & BYPASS FILTERS	103832, N166M1
40-35-6181	UNIT 40 TALC ADDITIVE RECEIVER FILTER	103832, N166M1
40-35-6191	UNIT 40 SLIP ADDITIVE RECEIVER FILTER	103832, N166M1
40-35-61AF	UNIT 40 ADDITIVE HOPER FILTERS A, B, C, D, E, F	103832, N166M1
40-35-6201	UNIT 40 EXTRUDER FEED HOPPER VENT & BYPASS FILTERS	103832, N166M1
40-35-6310	UNIT 40 PELLET SURGE HOPER FILTER	103832, N166M1
40-35-6401	UNIT 40 CENTRAL VACUUM SECONDARY FILTER	103832, N166M1
40-35-8011	UNIT 40 LOADOUT STORAGE AND OFF-SPECSILO FILTERS	103832, N166M1
40-35-8021	UNIT 40 LOADOUT STORAGE AND OFF-SPECSILO FILTERS	103832, N166M1
40-35-8103	UNIT 40 BLOWER GUARD FILTER	103832, N166M1
40-35-8120	UNIT 40 TALC ADDITIVE SILO VENT FILTER	103832, N166M1
40-35-8130	UNIT 40 SLIP ADDITIVE SILO VENT FILTER	103832, N166M1
40-36-1013	UNIT 40 CATALYST ACTIVATOR HEATER	103832, N166M1
40-36-1113	UNIT 41 CATALYST ACTIVATOR HEATER	103832, N166M1
41-25-6301	UNIT 41 PELLET DEWATERING DRYER	103832, N166M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
41-35-3102	PF CATALYST CHARGE PURGE FILTER	103832, N166M1
41-35-6105	UNIT 41 ADDITIVE BAG DISCHARGE FILTER	103832, N166M1
41-35-6106	UNIT 41 EXTRUDER FEED HOPPER VENT & BYPASS FILTER	103832, N166M1
41-35-61AD	UNIT 41 ADDITIVE HOPPER FILTERS A, B, C, D	103832, N166M1
41-35-6201	UNIT 41 EXTRUDER FEED HOPPER VENT & BYPASS FILTER	103832, N166M1
41-35-6401	UNIT 41 CENTRAL VACUUM SECONDARY FILTER	103832, N166M1
41-35-8011	UNIT 41 PELLET SILO VENT FILTER	103832, N166M1
41-35-8021	UNIT 41 PELLET SILO VENT FILTER	103832, N166M1
42-05-9201	COOLING TOWER	103832, N166M1
42-95-0421	FRESH 1-HEXENE TANK	103832, N166M1
42-95-0422	FRESH 1-HEXENE TANK	103832, N166M1
42-97-9610	MULTI-POINT GROUND FLARE	103832, N166M1
42-97-9620	VAPOR DESTRUCTION UNIT	103832, N166M1
42-97-9820	WASTEWATER (API SEPARATOR)	103832, N166M1
87-35-3120	SIT DEHEELING DUST FILTER	103832, N166M1
87-97-1510	FIRE WATER PUMP ENGINE	103832, N166M1
DG-01	DEGREASER 1	103832, N166M1
DG-02	DEGREASER 2	103832, N166M1
DG-03	DEGREASER 3	103832, N166M1
EMG-ENG1	EMERGENCY GENERATOR ENGINE	103832, N166M1
EMG-ENG2	EMERGENCY GENERATOR ENGINE	103832, N166M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EMG-ENG3	EMERGENCY GENERATOR ENGINE	103832, N166M1
EMG-ENGTK1	DIESEL TANK	103832, N166M1
EMG-ENGTK2	DIESEL TANK	103832, N166M1
EMG-ENGTK3	DIESEL TANK	103832, N166M1
FUG-01	FUGITIVE EMISSIONS	103832, N166M1
FWP-TK1	DIESEL TANK	103832, N166M1
PRODDDATM	POLYMER PROCESS UNIT 40 AND 41 VENTS TO ATMOSPHERE	103832, N166M1
PROUNIT40	POLYMER PROCESS UNIT 40	103832, N166M1
PROUNIT41	POLYMER PROCESS UNIT 41	103832, N166M1
TK-01	LOCOMOTIVE ENGINE TANK	103832, N166M1
UNLOAD1	UNLOADING OPERATION	103832, N166M1
VENT40FL	UNIT 40 VENTS TO FLARE	103832, N166M1
VENT40VDU	UNIT 40 VENTS TO VDU	103832, N166M1
VENT41FL	UNIT 41 VENTS TO FLARE	103832, N166M1
VENT41VDU	UNIT 41 VENTS TO VDU	103832, N166M1

Schedules

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Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
40-35-6201, 41-35-6201	N/A	VOC	NSR103832/N166M1	Special Condition 1 and MAERT pound per hour limit.
			40 CFR §60.560(g).	Exemption from control based on VOC concentration.
			30 TAC 115.127(a)(2)(A).	Exemption from Control based on VOC emission rate.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
NSR103832/N166M1.	MAERT lb/hr limit for the Extruder Feed Hopper Vent.		Stack testing results in Environmental Records.	
40 CFR §60.560(g).	Extruder Feed Hopper vent did not meet an exemption from NSPS Subpart DDD.		Stack testing results in Environmental Records.	
30 TAC 115.127(a)(2)(A).	Extruder Feed Hopper Vents did not meet an exemption from 30 TAC 115, Subchapter B, Vent gas Control.		Stack testing results in Environmental Records.	
3. Non-compliance Situation Description				
During recent vent testing, it was discovered that the Extruder Feed Hopper Vents (EPN 40-35-6201 and EPN 41-35-6201) exceeded the hourly emissions rate in the MAERT in NSR permit 103832 and did not meet specified exemption from NSPS based on VOC concentration exceeding .10 weight percent. In addition, Extruder Feed Hopper Vents (40-35-6201 and 41-35-6201) do not meet 100 pounds of VOC in any continuous 24-hour period exemption for control.				
4. Corrective Action Plan Description				
Facility will evaluate other exemption options or complete a project to control emissions within 36 months of Title V permit issuance.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Conduct regulatory review of exemption options to determine if another exemption option for NSPS Subpart DDD is available by July 31, 2018.			
2	Submit NSR permit amendment application within 6 months of issued Title V permit.			
3	Submit Title V revision per Chapter 122 timing after NSR permit amendment is issued.			
4	Include this non-compliance in the Title V Semi-annual report once the Title V permit is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action	Date Submitted	
		N/A		
7. Progress Report Submission Schedule		Include progress in the Title V semi-annual report once the Title V permit is issued.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
FUG-01	N/A	VOC	30 TAC §116.116.	Additional fugitive components were added during the detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
30 TAC §116.116.	Obtain authorization for emission sources.		Environmental Records.	
3. Non-compliance Situation Description				
Additional fugitive components were added during the detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.				
4. Corrective Action Plan Description				
Facility will submit an as-built NSR permit amendment application to update emissions within 6 months of the issuance of the Title V permit.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	NSR permit amendment application will be submitted within 6 months of issued Title V permit.			
2	Submit Title V revision per Chapter 122 timing after NSR permit amendment is issued.			
3	Include this non-compliance in the Title V Semi-annual report once the Title V permit is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
		N/A		
7. Progress Report Submission Schedule			Include progress in the Title V semi-annual report once the Title V permit is issued.	

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
40-36-1013, 40-36-1113, 41-35-6201, 40-35-6201,	N/A	PM, PM ₁₀ , PM _{2.5} .	NSR 103832/N166M1	Perform stack test for particulates within 180 days after initial startup for the Catalyst Activator Heater Vents, Extruder Feed Hopper Vents, and vapor destruction unit (VDU).
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method				Location of Records/Documentation
Citation		Text Description		
NSR 103832/N166M1 Special Condition 28		Perform stack test for particulates within 180 days after initial startup for the Catalyst Activator Heater Vents, Extruder Feed Hopper Vents, and vapor destruction unit (VDU).		Environmental Records.
3. Non-compliance Situation Description				
Stack testing for particulates on the Catalyst Activator Heater Vents (EPN 40-36-1013, 40-36-1113), Extruder Feed Hopper Vents (EPN 41-35-6201, 40-35-6201) and VDU (EPN 42-97-9620) did not occur within the 180 days as required in NSR 103832/N166M1.				
4. Corrective Action Plan Description				
Submitted a NSR permit alteration to TCEQ in June, 2018. Plan is to amend the condition to not require particulate testing from these units.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Respond to the TCEQ information requests and questions as requested.			
2	Submit Title V revision per Chapter 122 timing after NSR permit amendment is issued.			
3	Include this non-compliance in the Title V Semi-annual report once the Title V permit is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
N/A				
7. Progress Report Submission Schedule		Include progress in the Title V semi-annual report once the Title V permit is issued.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
42-97-9610 & 42-97-9620	N/A	CO, VOC, NOX	NSR 103832/N166M1	Special Condition 1 and MAERT ton per year cap limit.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
NSR 103832/N166M1	MAERT ton per year limit cap for VDU and Flare		NOx and CO CEMS data for the VDU. Flow and composition monitoring for the vent gas to the flare and VDU. Data in Environmental Records.	
3. Non-compliance Situation Description				
After recent startup of the Polyethylene Production Units, the PE Unit Flare (EPN 42-97-9610) and Vapor Destruction Unit (EPN 42-97-9620) exceeded the combined allowable TPY permit limit cap in the MAERT for VOC, CO, and NOx.				
4. Corrective Action Plan Description				
Facility will submit an as-built NSR permit amendment application to update emissions within 6 month of the issuance of the Title V permit.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	NSR permit amendment application will be submitted within 6 months of Title V permit issuance.			
2	Submit Title V permit revision per Chapter 122 timing after NSR permit amendment is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
N/A				
7. Progress Report Submission Schedule		Progress reports to be included with the Title V semi-annual reports.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
87-97-1510, FWP-ENGTK	N/A	VOC, NOx, CO	30 TAC §116.116	Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
30 TAC §116.116	Obtain authorization for emission sources		Environmental records	
3. Non-compliance Situation Description				
Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.				
4. Corrective Action Plan Description				
Submitted a NSR permit amendment application to TCEQ in February, 2017 to add sources.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Respond to TCEQ information requests and questions as requested.			
2	Submit Title V permit revision per Chapter 122 timing after NSR permit amendment is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action	Date Submitted	
		N/A		
7. Progress Report Submission Schedule		Progress reports to be included with Title V semi-annual reports.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
41-35-6310, 40-35-6310	N/A	VOC	30 TAC §116.116	Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
30 TAC §116.116	Obtain authorization for emission sources		Environmental records	
3. Non-compliance Situation Description				
Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.				
4. Corrective Action Plan Description				
Submitted a NSR permit amendment application to TCEQ in February, 2017 to add sources.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Respond to TCEQ information requests and questions as requested.			
2	Submit Title V permit revision per Chapter 122 timing after NSR permit amendment is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
		N/A		
7. Progress Report Submission Schedule		Progress reports to be included with Title V semi-annual reports.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
EMG-ENGTK1, EMG-ENGTK2, EMG-ENGTK3	N/A	VOC	30 TAC §116.116	Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
30 TAC §116.116	Obtain authorization for emission sources		Environmental records	
3. Non-compliance Situation Description				
Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1. VOCs represented and authorized but are not in MAERT.				
4. Corrective Action Plan Description				
Submitted a NSR permit amendment application to TCEQ in February, 2017 to add sources to the MAERT.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Respond to TCEQ information requests and questions as requested.			
2	Submit Title V permit revision per Chapter 122 timing after NSR permit amendment is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
		N/A		
7. Progress Report Submission Schedule		Progress reports to be included with Title V semi-annual reports.		

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
41-35-6105,	N/A	PM, PM10, PM2.5	30 TAC §116.116	Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.
2. Compliance Status Assessment Method and Records Location				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
30 TAC §116.116	Obtain authorization for emission sources		Environmental records	
3. Non-compliance Situation Description				
Sources with emissions were added during detailed design that was not included in the August 2013 initial authorization for NSR 103832/N166M1.				
4. Corrective Action Plan Description				
Submitted a NSR permit amendment application to TCEQ in February, 2017 to add sources.				
5. List of Activities/Milestones to Implement the Corrective Action Plan				
1	Respond to TCEQ information requests and questions as requested.			
2	Submit Title V permit revision per Chapter 122 timing after NSR permit amendment is issued.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
		N/A		
7. Progress Report Submission Schedule			Progress reports to be included with Title V semiannual reports.	

Alternative Requirement

Alternative Requirement..... 107

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



Alternative Method of Control (AMOC) Plan

AMOC No.: AMOC-31

Chevron Phillips Chemical Company, L.P.

Polyethylene Plant Multi-Point Ground Flare (MPGF) System

Sweeney, Brazoria County

Regulated Entity Number: RN100825249

- A. This AMOC Plan Authorization shall apply at the Chevron Phillips Chemical Company, L.P. (CPCHEM) for polyethylene production at the Old Ocean plant located near Sweeney, Brazoria County identified by Regulated Entity Number RN100825249 under Title 30 Texas Administrative Code Section 115.910 (30 TAC § 115.910) for the high pressure stages of a multi-point ground flare (MPGF) system for use during high-pressure emission events such as planned maintenance, start-ups and shut-downs (MSS) as well as unplanned emergency and upset situations.
- B. A copy of the AMOC application and the AMOC Plan provisions must be kept on-site or at a centralized location and made available at the request of personnel from the TCEQ or any pollution control agency with jurisdiction. The AMOC application is defined by the application received October 1, 2015 and supporting documentation submitted through January 13, 2017.
- C. This authorization is granted under § 115.910 for emissions sources regulated by 30 TAC Chapter 115, Subchapter B: General Volatile Organic Compound Sources, Division 2: Vent Gas Control and Subchapter H: Highly Reactive Volatile Organic Compounds, Division 1: Vent Gas Control. This AMOC shall apply in lieu of the requirements of 30 TAC §§ 115.122(a) and 115.722(d), as applicable. Compliance with this AMOC is independent of CPCHEM's obligation to comply with all other applicable requirements of 30 TAC Chapter 115, TCEQ permits and applicable state and federal law. The monitoring and testing requirements of 30 TAC §§ 115.125 and 115.725 shall continue to apply even though the flare is no longer subject to 30 TAC §§ 115.122(a) and 115.722(d).

Compliance with the requirements of this plan does not assure compliance with requirements of an applicable New Source Performance Standard, an applicable National Emission Standard for Hazardous Air Pollutants or an Alternative Means of Emission Limitation and does not constitute approval of alternative standards for these regulations.

- D. In accordance with 30 TAC § 115.913(c), all representations submitted for this plan, as well as the provisions listed here, become conditions upon which this AMOC Plan is issued. It is unlawful to vary from the emission limits, control requirements, monitoring, testing, reporting or recordkeeping requirements of this Plan.

- E. The high pressure stages of the MPGF system identified as EPN 42-97-9610 in Permit Nos. 103832 and N166 are subject to this AMOC plan. The system collects and combusts hydrocarbon streams during high pressure MSS activities and emergencies. Operations of the pressure-assisted MPGF will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted, or non-assisted flare complying with the requirements of §115.122(a), §115.722(d), 40 CFR 63.11(b), or 40 CFR 60.18(b).
- F. The high pressure MPGF system stages must be designed and operated such that the following are met:
1. Operating Requirements: For Stages 1 and 2: the net heating value of the flare vent gas combustion zone (NHV_{cz}) is greater than or equal to 600 British thermal units per standard cubic foot (Btu/scf); or the combustion zone gas lower flammability limit (LFL_{cz}) is less than or equal to 8.0 percent by volume.

For Stages 3 through 10: the NHV_{cz} is greater than or equal to 800 Btu/scf; or the LFL_{cz} is less than or equal to 6.5 percent by volume.

The owner or operator must demonstrate compliance with the NHV_{cz} or LFL_{cz} metric by continuously complying with a 15-minute block average. The operator must calculate and monitor for the NHV_{cz} or LFL_{cz} according to the following:

a. Calculation of NHV_{cz}

- i. The owner or operator shall determine the net heating value using the following equation:

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i$$

Where:

NHV_{vg} = Net heating value of flare vent gas, British thermal units per standard cubic foot (Btu/scf).

Flare vent gas means all gas found just prior to the MPGF. This gas includes all flare waste gas (i.e., gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

i = Individual component in flare vent gas.

n = Number of components in flare vent gas.

x_i = Concentration of component i in flare vent gas, volume percent (vol %).

NHV_i = Net heating value of component i determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric basis using 20 °C for "standard temperature." Table 1 (Appendix) summarizes component properties including net heating values.

- ii. For MPGF Stages 3 -10, $NHV_{vg} = NHV_{cz}$.

- iii. For MPGF Stages 1 - 2, $NHV_{cz} = \frac{Q_{vg} \times NHV_{vg}}{(Q_{vg} + Q_s)}$

Where:

NHV_{cz} = Net heating value of flare vent gas (Btu/scf).

NHV_{vg} = Net heating value of flare vent gas, Btu/scf for the 15-minute block period as determined according to (1)(a)(i) above.

Q_{vg} = Cumulative volumetric flow of flare gas vent in scf during the 15-minute block period.

Q_s = Cumulative volumetric flow of total assist steam in scf during the 15-minute block period.

b. Calculation of LFL_{cz}

- i. The owner or operator shall determine LFL_{cz} from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left[\frac{x_i}{LFL_i} \right]} * 100 \%$$

Where:

LFL_{vg} = Lower flammability limit of flare vent gas, volume percent (vol %)

n = Number of components in the vent gas.

i = Individual component in the vent gas.

x_i = Concentration of component i in the vent gas, vol %.

LFL_i = Lower flammability limit of component i as determined using values published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (e.g., $LFL_{N_2} = \infty$, so that $c_{N_2} / LFL_{N_2} = 0$). LFL values for common flare vent gas components are provided in Table 1 (Appendix).

- ii. For MPGF Stages 3 - 10, $LFL_{vg} = LFL_{cz}$.
- iii. For MPGF Stages 1 - 2, LFL_{cz} shall be calculated using the following equation:

$$LFL_{cz} = \frac{LFL_{vg} \times (Q_{vg} + Q_s)}{Q_{vg}}$$

Where:

LFL_{cz} = Lower flammability limit of combustion zone gas (vol %).

LFL_{vg} = Lower flammability limit of flare vent gas (vol %)

Q_{vg} = Cumulative volumetric flow of flare gas vent in scf during the 15-minute block period.

Q_s = Cumulative volumetric flow of total assist steam in scf during the 15-minute block period.

- c. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring flare vent gas volumetric flow rate (Q_{vg}) and the total assist steam volumetric flow rate (Q_s).
 - i. The flow rate monitoring system must be able to correct for the temperature and pressure of the system and output parameters in standard conditions (i.e., a temperature of 20 degrees C (68 ° F) and a pressure of 1 atmosphere).
 - ii. Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation:

$$Q_{vol} = \frac{Q_{mass} \times 385.3}{MW_t}$$

Where:

Q_{vol} = volumetric flow rate in scf per second (scf/s).

Q_{mass} = mass flow rate in pounds per second (lb/s)

385.3 = conversion factor scf per pound-mole

MW_t = molecular weight of the gas at the flow monitoring location, pounds per pound-mole

- iii. Mass flow monitors may be used for determining volumetric flow rate of total assist steam. Use the equation in (1)(c)(ii) to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for total assist steam.
 - d. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), temperature consistent with the applicable requirements in 30 TAC §115 for purposes of correcting flow rate to standard conditions. The monitor must meet the accuracy and calibration specifications annually.
 - e. The operator shall install, operate, calibrate and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), calculating, and recording the individual component concentrations present in the flare vent gas or install, operate, calibrate and maintain a monitoring system capable of continuously measuring, calculating and recording NHV_{vg} (in Btu/scf).
 - f. For each measurement produced by the monitoring system, the operator shall determine the 15-minute block average as the arithmetic average of all measurements made by the monitoring system within the 15-minute period.
 - g. The operator must follow the calibration and maintenance procedures according to Table 2 (Appendix). Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy. Zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.
2. Pilot Flame Requirements: The MPGF system shall be operated with a flame present at all times when in use. Each burner on MPGF Stages 1 and 2 must have a pilot with a continuously lit pilot flame. Each of Stages 3 - 10 burners must be equipped with at least two pilots with a continuously lit pilot flame.

The pilot flame(s) must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date and duration of any complete loss of pilot flame on any of the individual burners of Stages 1 and 2, or on Stages 3 -10 burners, must be recorded. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

3. Visible Emission Requirements: When the flare is receiving regulated material, the MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A video camera that is capable of continuously recording (i.e., at least one frame every 15 seconds with time and date stamps) images of the flare flame and a

reasonable distance above the flare flame at an angle suitable for visible emissions observations must be used to demonstrate compliance with this requirement. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the video camera images may be viewed at any time.

4. **Monitor Requirements:** The operator of a MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The pressure monitor shall meet the requirements in Table 2 (Appendix).

Monitor downtime associated with maintenance periods, instrument adjustments or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material. Calibration and maintenance procedures conducted when the flare is not receiving regulated material are excluded from the monitor downtime calculation.

5. **Recordkeeping Requirements:** All data must be recorded and maintained for a minimum of five years or for as long as applicable rule subpart(s) specify flare records should be kept, whichever is longer. Records must be maintained onsite and made available upon request by authorized representatives of the executive director, U.S. EPA, and any local air pollution control agency with jurisdiction.
6. **Reporting Requirements**
 - a. The information specified in (b) and (c) below should be reported in the timeline specified by the applicable rules for which the MPGF will control emissions.
 - b. Owners or operators should include the following information in their initial Monitoring Plan:
 - i. Specify flare design as a pressure assisted MPGF with clear notations that Stages 1 and 2 are steam-assisted.
 - ii. All visible emission readings, *NHVCz* and/or *LFLCz* determinations, and flow rate measurements. For MPGF, exit velocity determinations do not need to be reported.
 - iii. All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs and for Stages 1 and 2 all periods when a complete loss of pilot flare on an individual burner occurs.
 - iv. All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.
 - v. All periods during the compliance determination when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation, but is; or when a stage of the MPGF should be in operation, but is not.

- c. The owner or operator shall notify the executive director of periods of excess emissions in their Title V Periodic Reports. These periods of excess emissions shall include:
- i. Each 15-minute block during which there was at least one minute when regulated material was routed to the MPGF and a complete loss of pilot flame on Stages 3 - 10 occurred or a complete loss of pilot flame on any individual burner on Stages 1 and 2 occurred.
 - ii. Periods of visible emissions events that are time and date stamped and exceed more than 5 minutes in any 2 hour consecutive period.
 - iii. Each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*, *NHVCz* or *LFLcz*) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the *NHVCz* and/or *LFLcz* operating parameter for the period, the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter), and the MPGF stages which were in use.
 - iv. Periods when the pressure monitor(s) on the main flare header show the MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected and the range of tested conditions or manufacturer's specifications.
 - v. Periods when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation, but is; or when a stage of the MPGF should be in operation, but is not. Indicate the date and time for each period, whether the stage was supposed to be open but was closed or vice versa and the stage(s) and number of MPGF burners affected.

APPENDIX Table 1 — Individual Component Properties

Component	Molecular Formula	MWl (lb/ lb mol)	NHVi (Btu/scf)	LFLi (volume %)
Acetylene	C2H2	26.04	1,404	2.5
Benzene	C6H6	78.11	3,591	1.3
1,2- Butadiene	C4H6	54.09	2,794	2.0
1,3- Butadiene	C4H6	54.09	2,690	2.0
iso-Butane	C4H10	58.12	2,957	1.8
n-Butane	C4H10	58.12	2,968	1.8
cis-Butene	C4H8	56.11	2,830	1.6
iso-Butene	C4H8	56.11	2,928	1.8
trans-Butene	C4H8	56.11	2,826	1.7
Carbon Dioxide	CO2	44.01	0	∞
Carbon Monoxide	CO	28.01	316	12.5
Cyclopropane	C3H6	42.08	2,185	2.4
Ethane	C2H6	30.07	1,595	3.0
Ethylene	C2H4	28.05	1,477	2.7
Hydrogen	H2	2.02	274	4.0
Hydrogen Sulfide	H2S	34.08	587	4.0
Methane	CH4	16.04	896	5.0
MethylAcetylene	C3H4	40.06	2,088	1.7
Nitrogen	N2	28.01	0	∞
Oxygen	O2	32.00	0	∞
Pentane+ (C5+)	C5H12	72.15	3,655	1.4
Propadiene	C3H4	40.06	2,066	2.16
Propane	C3H8	44.10	2,281	2.1
Propylene	C3H6	42.08	2,150	2.4
Water	H2O	18.02	0	∞

APPENDIX Table 2 — Accuracy and Calibration Requirements

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate	<p>±20 percent of flow rate at velocities ranging from 0.1 to 1 feet per second.</p> <p>±5 percent of flow rate at velocities greater than 1 foot per second.</p>	<p>Performance evaluation biennially (every two years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale.</p> <p>Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor.</p> <p>Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.</p>
Pressure	<p>±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.</p>	<p>Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated.</p> <p>Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor.</p> <p>Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.</p>
Net Heating Value by Calorimeter	<p>±2 percent of span</p>	<p>Calibration requirements should follow manufacturer's recommendations at a minimum.</p> <p>Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation.</p> <p>Where feasible, select a sampling location at least two equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least two equivalent duct diameters from the nearest control device, point of pollutant generation, air in leakages, or other point at which a change in the pollutant concentration or emission rate occurs.</p>
Net Heating Value by Gas Chromatograph	<p>As specified in Performance Specification 9 of 40 CFR part 60 Appendix B.</p>	<p>Follow the procedure in Performance Specification 9 of 40 CFR Part 60 Appendix B, except that a single daily mid-level calibration check can be used, a triplicate mid-level check weekly, and the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).</p>

APPENDIX 3 — Acronyms and Abbreviations

The AMOC uses multiple acronyms and terms, defined here (please note this list is not exhaustive):

AMEL	alternative means of emission limitation
AMOC	Alternate Method of Compliance or Control
Btu/scf	British thermal units per standard cubic foot
CAA	Clean Air Act
CBI	confidential business information
CFR	Code of Federal Regulations
CPCHEM	Chevron Phillips Chemical Company LP
EPA	Environmental Protection Agency
EPN	Emission Point Number
Eqn	equation
HAP	hazardous air pollutants
HP	high pressure
LFL	lower flammability limit
<i>LFLcz</i>	lower flammability limit of combustion zone gas
<i>LFLvg</i>	lower flammability limit of flare vent gas
MPGF	multi-point ground flares
MSS	planned maintenance, start-ups and shut-downs
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHV	net heating value
<i>NHVcz</i>	net heating value of combustion zone gas
<i>NHVvg</i>	net heating value of flare vent gas
NSPS	New Source Performance Standards
OAQPS	Office of Air Quality Planning and Standards
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
scf	standard cubic feet
VOC	volatile organic compounds



27822

Ford: <https://www.epa.gov/vehicle-and-engine-certification/ford-compliance-materials-light-duty-greenhouse-gas-ghg-standards>

Hyundai: <https://www.epa.gov/vehicle-and-engine-certification/hyundai-compliance-materials-light-duty-greenhouse-gas-ghg-standards>

EPA is providing a 30-day comment period on the applications for off-cycle credits described in this action, as specified by the regulations. The manufacturers may submit a written rebuttal of comments for EPA's consideration, or may revise an application in response to comments. After reviewing any public comments and any rebuttal of comments submitted by manufacturers, EPA will make a final decision regarding the credit requests. EPA will make its decision available to the public by placing a decision document (or multiple decision documents) in the docket and on EPA's Web site at the same manufacturer-specific pages shown previously. While the broad methodologies used by these manufacturers could potentially be used for other vehicles and by other manufacturers, the vehicle specific data needed to demonstrate the off-cycle emissions reductions would likely be different. In such cases, a new application would be required, including an opportunity for public comment.

Dated: May 16, 2017.

Byron J. Bunker,
Director, Compliance Division, Office of
Transportation and Air Quality, Office of Air
and Radiation.

[FR Doc. 2017-12737 Filed 6-16-17; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OAR-2014-0738; FRL-9963-44-
OAR]

Notice of Final Approval for an Alternative Means of Emission Limitation at Chevron Phillips Chemical Company LP

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice; final approval.

SUMMARY: This notice announces our approval of the Alternative Means of Emission Limitation (AMEL) request from Chevron Phillips Chemical Company LP (CP Chem) under the Clean Air Act (CAA) to operate a multi-point ground flare (MPGF) at their ethylene plant in Baytown, Texas, and to operate an MPGF at their polyethylene plant in

Old Ocean, Texas. This approval notice specifies the operating conditions and monitoring, recordkeeping, and reporting requirements that these facilities must follow to demonstrate compliance with the approved AMEL.

DATES: The approval of the AMEL request for the MPGF at CP Chem's ethylene plant in Baytown, Texas, and the MPGF at CP Chem's polyethylene plant in Old Ocean, Texas, is effective on June 19, 2017.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2014-0738. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov>, or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. Andrew Bouchard, Sector Policies and Programs Division (E143-01), Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4036; fax number: (919) 541-3470; and email address: bouchard.andrew@epa.gov.

SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. We use multiple acronyms and terms in this notice. While this list may not be exhaustive, to ease the reading of this notice and for reference purposes, the EPA defines the following terms and acronyms here:

AMEL alternative means of emission limitation
Btu/scf British thermal units per standard cubic foot
CAA Clean Air Act
CBI confidential business information
CFR Code of Federal Regulations
CP Chem Chevron Phillips Chemical

Company LP
EPA Environmental Protection Agency
Eqn equation
HAP hazardous air pollutants
HP high pressure
LFL lower flammability limit
LFL_{ex} lower flammability limit of combustion zone gas
LFL_{vg} lower flammability limit of flare vent gas
MPGF multi-point ground flare
NESHAP national emission standards for hazardous air pollutants
NHV net heating value
NHV_{ex} net heating value of combustion zone gas
NHV_{vg} net heating value of flare vent gas
NSPS new source performance standards
OAQPS Office of Air Quality Planning and Standards
scf standard cubic feet
VOC volatile organic compounds

Organization of This Document. The information in this notice is organized as follows:

- I. Background
 - A. Summary
 - B. Regulatory Flare Requirements and CP Chem's AMEL Request
- II. Summary of Public Comments on CP Chem's AMEL Request
- III. Final Notice of Approval of CP Chem's AMEL Request and Required Operating Conditions

I. Background

A. Summary

In a **Federal Register** notice dated April 4, 2017, the EPA provided public notice and solicited comment on CP Chem's AMEL request under the CAA for the operation of an MPGF at an ethylene plant in Baytown, Texas, and for the operation of an MPGF at a polyethylene plant in Old Ocean, Texas (see 82 FR 16392).¹ This action solicited comment on all aspects of the AMEL request, including the operating conditions specified in that action that are necessary to achieve a reduction in emissions of volatile organic compounds (VOC) and organic hazardous air pollutants (HAP) at least equivalent to the reduction in emissions required by various standards in 40 CFR parts 60, 61, and 63 that apply to emission sources that would be controlled by these MPGFs. These standards incorporate the design and operating requirements for flares in the General Provisions to parts 60 and 63 as part of the emission reduction requirements. Because the two proposed MPGFs cannot meet the velocity requirements in these General

¹ The MPGFs at both the ethylene plant and polyethylene plant will utilize pressure-assisted burners on all the high pressure (HP) stages; however, the first two stages on the MPGF at the polyethylene plant will also be steam-assisted.

Provisions, CP Chem requested an AMEL. In its request, CP Chem demonstrates that the proposed AMEL for each of the two facilities would achieve at least equivalent emissions reductions as flares that meet the standards in the General Provisions.

This action provides a summary of the comments received as part of the public review process, our response to those comments, and our approval of the AMEL request received from CP Chem for use of MPGFs at both their ethylene plant in Baytown, Texas, and polyethylene plant in Old Ocean, Texas, along with the operating conditions they must follow for demonstrating compliance with the approved AMEL.

B. Regulatory Flare Requirements and CP Chem's AMEL Request

CP Chem submitted a complete MPGF AMEL request, following the MPGF AMEL framework that was published in the **Federal Register** (see 81 FR 23480, April 21, 2016), to the EPA on November 28, 2016. CP Chem sought an AMEL to operate an MPGF for use during limited HP maintenance, startup, and shutdown events, as well as during upset events at their ethylene plant in Baytown, Texas. In addition, CP Chem sought an AMEL to operate an MPGF during certain routine operations (*i.e.*, the first two stages only), as well as during periods of maintenance, startup, shutdown, and upset at their polyethylene plant in Old Ocean, Texas. In its request, CP Chem cited various regulatory requirements in 40 CFR parts

60, 61, and 63 that will apply to the flare vent gas streams that will be collected and routed to their MPGFs at each of these two plants. See Table 1 for a list of regulations, by subparts, that CP Chem has identified as applicable to the two plants described above. These new source performance standards (NSPS) and national emissions standards for hazardous air pollutants (NESHAP) require that flares subject to these subparts meet the flare design and operating requirements in the General Provisions of part 60 and 63, respectively (*i.e.*, 40 CFR 60.18(b) and 63.11(b)). CP Chem is requesting that the EPA approve the AMEL to be used by each of the two plants for complying with the flare requirements in the relevant subparts as specified in Table 1.

TABLE 1—SUMMARY OF APPLICABLE RULES THAT MAY APPLY TO VENT STREAMS CONTROLLED BY MULTI-POINT GROUND FLARES

Applicable rules with vent streams going to control device(s)	CP chem ethylene plant	CP chem polyethylene plant	Rule citation from Title 40 CFR that allow for use of a flare	Provisions for alternative means of emission limitation
NSPS Subpart VV		X	60.482–10(d)	60.484(a)–(f).
NSPS Subpart VVa	X		60.482–10a(d)	60.484a(a)–(f).
NSPS Subpart DDD		X	60.562–1(a)(1)(i)(C)	CAA section 111(h)(3).
NSPS Subpart NNN	X		60.662(b)	CAA section 111(h)(3).
NSPS Subpart RRR	X		60.702(b)	CAA section 111(h)(3).
NESHAP Subpart FF	X		61.349(a)(2)	61.353(a); also see 61.12(d).
NESHAP Subpart SS	X		63.982(b)	CAA section 112(h)(3).
NESHAP Subpart UU	X		63.1034	63.1021(a)–(d).
NESHAP Subpart XX	X		63.1091	63.1097(b)(1).
			* Note—This subpart cross-references to NESHAP subpart FF above.	
NESHAP Subpart YY	X		Table 7 to § 63.1103(e) cross-references to NESHAP subpart SS above.	63.1113.
NESHAP Subpart FFFF		X	63.2450(e)(2)	63.2545(b)(1); also see 63.6(g).

The provisions in each NSPS and NESHAP cited in Table 1 that ensure flares meet certain specific requirements when used to satisfy the requirements of the NSPS or NESHAP were established as work practice standards pursuant to CAA sections 111(h)(1) or 112(h)(1). For standards established according to these provisions, CAA sections 111(h)(3) and 112(h)(3) allow the EPA to permit the use of an AMEL by a source if, after notice and opportunity for comment,² it is established to the Administrator's satisfaction that such AMEL will achieve emission reduction at least equivalent to the reduction required under the CAA section 111(h)(1) or

² CAA section 111(h)(3) specifically requires that the EPA provide an opportunity for a public hearing. The EPA provided an opportunity for a public hearing in the April 4, 2017, **Federal Register** action. However, no public hearing was requested.

112(h)(1) standard. As noted in Table 1, many of the NSPS and NESHAP in the table above also include specific regulatory provisions allowing sources to request an AMEL.

CP Chem sought such an AMEL request because their MPGFs are not designed to operate below the maximum permitted velocity requirements for flares in the General Provisions of 40 CFR parts 60 and 63. CP Chem provided information that the MPGFs they propose to use will achieve a reduction in emissions at least equivalent to the reduction in emissions for flares complying with these General Provisions requirements (for further background information on the regulatory flare requirements and a facility's ability to request an AMEL, see 82 FR 16392–16399, April 4, 2017).

II. Summary of Public Comments on CP Chem's AMEL Request

The EPA received eight public comments on this action. The public comments received fell into one of the following three bins: (1) General support for CP Chem's AMEL request, (2) general opposition to CP Chem's AMEL request, and (3) general comments outside the scope of the action. None of the comments raised issues or otherwise mentioned any specific aspect of the MPGFs (including any operating condition) proposed for either of the two plants or the EPA's authority to approve these AMEL under the CAA. None of the commenters who opposed the EPA's proposal to approve the AMEL with the operating conditions specified in the April 4, 2017, action asserted that the EPA lacked authority to approve the AMEL or that the AMEL would not achieve at least equivalent

emissions reductions as flares that meet the standards in the General Provisions. Additionally, the one commenter who generally opposed CP Chem's AMEL request did not provide any substantive reason for why they opposed the request, other than to note that existing regulations should be followed. Therefore, no changes have been made to the operating conditions specified in the April 4, 2017, action.

III. Final Notice of Approval of CP Chem's AMEL Request and Required Operating Conditions

Based on information the EPA received from CP Chem and the comments received through the public comment period, we are approving CP Chem's request for an AMEL and establishing operating requirements for the MPGF at CP Chem's ethylene plant in Baytown, Texas, and the MPGF at CP Chem's polyethylene plant in Old Ocean, Texas. The operating conditions for CP Chem's MPGF that will achieve a reduction in emissions at least equivalent to the reduction in emissions being controlled by a steam-assisted, air-assisted, or non-assisted flare complying with the requirements of either 40 CFR 63.11(b) or 40 CFR 60.18(b) are as follows: (1) The MPGF system for all HP stages at CP Chem's ethylene plant and for all HP stages excluding stage 1 and 2 for CP Chem's polyethylene plant

must be designed and operated such that the net heating value of the combustion zone gas (NHV_{cz}) is greater than or equal to 800 British thermal units per standard cubic foot (Btu/scf) or lower flammability limit of the combustion zone gas (LFL_{cz}) is less than or equal to 6.5 percent by volume. The MPGF system for HP stages 1 and 2 of CP Chem's polyethylene plant must be designed and operated such that the NHV_{cz} is greater than or equal to 600 Btu/scf or the LFL_{cz} is less than or equal to 8.0 percent by volume. Owners or operators must demonstrate compliance with the NHV_{cz} or LFL_{cz} metric by continuously complying with a 15-minute block average. Owners or operators must calculate and monitor for the NHV_{cz} or LFL_{cz} according to the following:

(a) Calculation of NHV_{cz}

(i) The owner or operator shall determine the net heating value of flare vent gas (NHV_{vg}) by following the requirements of (1)(d)–(1)(e) below. If an owner or operator elects to use a monitoring system capable of continuously measuring (*i.e.*, at least once every 15 minutes), calculating, and recording the individual component concentrations present in the flare vent gas, NHV_{vg} shall be calculated using the following equation:

$$NHV_{cz} = \frac{Q_{vg} \times NHV_{vg}}{(Q_{vg} + Q_s)} \quad (\text{Eqn. 2})$$

Where:

NHV_{cz} = Net heating value of combustion zone gas, Btu/scf.

NHV_{vg} = Net heating value of flare vent gas for the 15-minute block period as determined according to (1)(a)(i) above,

Btu/scf.

Q_{vg} = Cumulative volumetric flow of flare vent gas during the 15-minute block period, standard cubic feet (scf).

Q_s = Cumulative volumetric flow of total assist steam during the 15-minute block period, scf.

$$NHV_{vg} = \sum_{i=1}^n x_i NHV_i \quad (\text{Eqn. 1})$$

Where:

NHV_{vg} = Net heating value of flare vent gas, Btu/scf. Flare vent gas means all gas found just prior to the MPGF. This gas includes all flare waste gas (*i.e.*, gas from facility operations that is directed to a flare for the purpose of disposing of the gas), flare sweep gas, flare purge gas and flare supplemental gas, but does not include pilot gas.

i = Individual component in flare vent gas.
 n = Number of components in flare vent gas.

x_i = Concentration of component i in flare vent gas, volume fraction.

NHV_i = Net heating value of component i determined as the heat of combustion where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius (°C) and 1 atmosphere (or constant pressure) with water in the gaseous state from values published in the literature, and then the values converted to a volumetric basis using 20 °C for "standard temperature." Table 2 summarizes component properties including net heating values.

(ii) For all MPGF HP stages at CP Chem's ethylene plant and for all MPGF HP stages, excluding stage 1 and 2 for CP Chem's polyethylene plant, NHV_{vg} = NHV_{cz} .

(iii) For HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, NHV_{cz} shall be calculated using the following equation:

(b) Calculation of LFL_{cz}

(i) The owner or operator shall determine LFL_{cz} from compositional analysis data by using the following equation:

$$LFL_{vg} = \frac{1}{\sum_{i=1}^n \left(\frac{X_i}{LFL_i} \right)} \times 100\% \quad (\text{Eqn. 3})$$

Where:

LFL_{vg} = Lower flammability limit of flare vent gas, volume percent (vol %).

n = Number of components in the vent gas.

i = Individual component in the vent gas.

X_i = Concentration of component i in the vent gas, vol %.

LFL_i = Lower flammability limit of component i as determined using values

published by the U.S. Bureau of Mines (Zabetakis, 1965), vol %. All inerts, including nitrogen, are assumed to have an infinite LFL (*e.g.*, $LFL_{N_2} = \infty$, so that $X_{N_2}/LFL_{N_2} = 0$). LFL values for common flare vent gas components are provided in Table 2.

(ii) For all MPGF HP stages at CP Chem's ethylene plant and for all MPGF

HP stages, excluding stages 1 and 2 for CP Chem's polyethylene plant, LFL_{vg} = LFL_{cz} .

(iii) For HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, LFL_{cz} shall be calculated using the following equation:

$$LFL_{cr} = \frac{LFL_{vg} \times (Q_{vg} + Q_s)}{Q_{vg}} \quad (\text{Eqn. 4})$$

Where:

LFL_{cr} = Lower flammability limit of combustion zone gas, vol %.

LFL_{vg} = Lower flammability limit of flare vent gas, vol %.

Q_{vg} = Cumulative volumetric flow of flare vent gas during the 15-minute block period, scf.

Q_s = Cumulative volumetric flow of total assist steam during the 15-minute block period, scf.

(c) The operator of an MPGF system shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring the volumetric flow rate of flare vent gas (Q_{vg}) and the volumetric flow rate of total assist steam (Q_s).

(i) The flow rate monitoring systems must be able to correct for the temperature and pressure of the system and output parameters in standard conditions (*i.e.*, a temperature of 20 °C (68 °F) and a pressure of 1 atmosphere).

(ii) Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular

weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation:

$$Q_{vol} = \frac{Q_{mass} \times 385.3}{MW_i} \quad (\text{Eqn. 5})$$

Where:

Q_{vol} = Volumetric flow rate, scf per second.

Q_{mass} = Mass flow rate, pounds per second.

385.3 = Conversion factor, scf per pound-mole.

MW_i = Molecular weight of the gas at the flow monitoring location, pounds per pound-mole.

(iii) Mass flow monitors may be used for determining volumetric flow rate of total assist steam. Use Equation 5 to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for total assist steam.

(d) The operator shall install, operate, calibrate, and maintain a monitoring

system capable of continuously measuring (*i.e.*, at least once every 15 minutes), calculating, and recording the individual component concentrations present in the flare vent gas or the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording NHV_{vg} (in Btu/scf).

(e) For each measurement produced by the monitoring system used to comply with (1)(d) above, the operator shall determine the 15-minute block average as the arithmetic average of all measurements made by the monitoring system within the 15-minute period.

(f) The operator must follow the calibration and maintenance procedures according to Table 3. Maintenance periods, instrument adjustments, or checks to maintain precision and accuracy and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

TABLE 2—INDIVIDUAL COMPONENT PROPERTIES

Component	Molecular formula	MW_i (pounds per pound-mole)	NHV_i (British thermal units per standard cubic foot)	LFL_i (volume %)
Acetylene	C_2H_2	26.04	1,404	2.5
Benzene	C_6H_6	78.11	3,591	1.3
1,2-Butadiene	C_4H_6	54.09	2,794	2.0
1,3-Butadiene	C_4H_6	54.09	2,690	2.0
iso-Butane	C_4H_{10}	58.12	2,957	1.8
n-Butane	C_4H_{10}	58.12	2,968	1.8
cis-Butene	C_4H_8	56.11	2,830	1.6
iso-Butene	C_4H_8	56.11	2,928	1.8
trans-Butene	C_4H_8	56.11	2,826	1.7
Carbon Dioxide	CO_2	44.01	0	∞
Carbon Monoxide	CO	28.01	316	12.5
Cyclopropane	C_3H_6	42.08	2,185	2.4
Ethane	C_2H_6	30.07	1,595	3.0
Ethylene	C_2H_4	28.05	1,477	2.7
Hydrogen	H_2	2.02	274	4.0
Hydrogen Sulfide	H_2S	34.08	587	4.0
Methane	CH_4	16.04	896	5.0
Methyl-Acetylene	C_3H_4	40.06	2,088	1.7
Nitrogen	N_2	28.01	0	∞
Oxygen	O_2	32.00	0	∞
Pentane+ (C5+)	C_5H_{12}	72.15	3,655	1.4
Propadiene	C_3H_4	40.06	2,066	2.16
Propane	C_3H_8	44.10	2,281	2.1
Propylene	C_3H_6	42.08	2,150	2.4
Water	H_2O	18.02	0	∞

TABLE 3—ACCURACY AND CALIBRATION REQUIREMENTS

Parameter	Accuracy requirements	Calibration requirements
Flare Vent Gas Flow Rate.	±20 percent of flow rate at velocities ranging from 0.1 to 1 foot per second. ±5 percent of flow rate at velocities greater than 1 foot per second.	Performance evaluation biennially (every 2 years) and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspections and checks of system operation every 3 months, unless the system has a redundant flow sensor. Select a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Flow Rate for All Flows Other Than Flare Vent Gas.	±5 percent over the normal range of flow measured or 1.9 liters per minute (0.5 gallons per minute), whichever is greater, for liquid flow. ±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute), whichever is greater, for gas flow. ±5 percent over the normal range measured for mass flow.	Conduct a flow sensor calibration check at least biennially (every two years); conduct a calibration check following any period of more than 24 hours throughout which the flow rate exceeded the manufacturer's specified maximum rated flow rate or install a new flow sensor. At least quarterly, inspect all components for leakage, unless the continuous parameter monitoring system has a redundant flow sensor.
Pressure	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.	Record the results of each calibration check and inspection. Locate the flow sensor(s) and other necessary equipment (such as straightening vanes) in a position that provides representative flow; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
Net Heating Value by Calorimeter.	±2 percent of span	Review pressure sensor readings at least once a week for straight-line (unchanging) pressure and perform corrective action to ensure proper pressure sensor operation if blockage is indicated. Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation, and galvanic corrosion every 3 months, unless the system has a redundant pressure sensor. Select a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
Net Heating Value by Gas Chromatograph.	As specified in Performance Specification (PS) 9 of 40 CFR part 60, appendix B.	Calibration requirements should follow manufacturer's recommendations at a minimum. Temperature control (heated and/or cooled as necessary) the sampling system to ensure proper year-round operation. Where feasible, select a sampling location at least 2 equivalent diameters downstream from and 0.5 equivalent diameters upstream from the nearest disturbance. Select the sampling location at least 2 equivalent duct diameters from the nearest control device, point of pollutant generation, air in-leakages, or other point at which a change in the pollutant concentration or emission rate occurs.
		Follow the procedure in PS 9 of 40 CFR part 60, appendix B, except that a single daily mid-level calibration check can be used (rather than triplicate analysis), the multi-point calibration can be conducted quarterly (rather than monthly), and the sampling line temperature must be maintained at a minimum temperature of 60 °C (rather than 120 °C).

(2) The MPGF system shall be operated with a flame present at all times when in use. Each burner on HP stages 1 and 2 of CP Chem's polyethylene plant MPGF must have a pilot with a continuously lit pilot flame. Additionally, each HP stage of CP Chem's ethylene plant MPGF and all HP stages, excluding stages 1 and 2 for CP Chem's polyethylene plant MPGF, must have at least two pilots with a continuously lit pilot flame. Each pilot flame must be continuously monitored by a thermocouple or any other equivalent device used to detect the presence of a flame. The time, date, and duration of any complete loss of pilot flame on any of the individual MPGF burners on HP stages 1 and 2 of CP

Chem's polyethylene plant MPGF, on any of the HP stages of CP Chem's ethylene plant MPGF, and on any of the HP stages, excluding stages 1 and 2 of CP Chem's polyethylene plant MPGF, must be recorded. Each monitoring device must be maintained or replaced at a frequency in accordance with the manufacturer's specifications.

(3) The MPGF system shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. A video camera that is capable of continuously recording (i.e., at least one frame every 15 seconds with time and date stamps) images of the flare flame and a reasonable distance above the flare flame at an angle suitable for

visible emissions observations must be used to demonstrate compliance with this requirement. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the video camera images may be viewed at any time.

(4) The operator of an MPGF system shall install and operate pressure monitor(s) on the main flare header, as well as a valve position indicator monitoring system capable of monitoring and recording the position for each staging valve to ensure that the MPGF operates within the range of tested conditions or within the range of the manufacturer's specifications. The

pressure monitor shall meet the requirements in Table 3. Maintenance periods, instrument adjustments or checks to maintain precision and accuracy, and zero and span adjustments may not exceed 5 percent of the time the flare is receiving regulated material.

(5) Recordkeeping Requirements.
(a) All data must be recorded and maintained for a minimum of 3 years or for as long as required under applicable rule subpart(s), whichever is longer.
(6) Reporting Requirements.

(a) The information specified in sections III (6)(b) and (c) of this document below must be reported in the timeline specified by the applicable rule subpart(s) for which the MPGF will control emissions.

(b) Owners or operators shall include the following information in their initial Notification of Compliance status report:

(i) Specify flare design as a pressure-assisted MPGF. CP Chem's polyethylene plant shall also clearly note that HP stages 1 and 2 are also steam-assisted.

(ii) All visible emission readings, NHV_{ex} and/or LFL_{ex} determinations, and flow rate measurements. For MPGF, exit velocity determinations do not need to be reported as the maximum permitted velocity requirements in the General Provisions at 40 CFR 60.18(b) and 40 CFR 63.11(b) are not applicable.

(iii) All periods during the compliance determination when a complete loss of pilot flame on any stage of MPGF burners occurs, and, for HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, all periods during the compliance determination when a complete loss of pilot flame on an individual burner occurs.

(iv) All periods during the compliance determination when the pressure monitor(s) on the main flare header show the MPGF burners operating outside the range of tested conditions or outside the range of the manufacturer's specifications.

(v) All periods during the compliance determination when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation and is or when a stage of the MPGF should be in operation and is not.

(c) The owner or operator shall notify the Administrator of periods of excess emissions in their Periodic Reports. These periods of excess emissions shall include:

(i) Records of each 15-minute block for all HP stages of CP Chem's ethylene plant MPGF and for all HP stages excluding stages 1 and 2 of CP Chem's polyethylene plant MPGF during which

there was at least 1 minute when regulated material was routed to the MPGF and a complete loss of pilot flame on a stage of burners occurred, and, for HP stages 1 and 2 of CP Chem's polyethylene plant MPGF, records of each 15-minute block during which there was at least 1 minute when regulated material was routed to the MPGF and a complete loss of pilot flame on an individual burner occurred.

(ii) Records of visible emissions events (including the time and date stamp) that exceed more than 5 minutes in any 2-hour consecutive period.

(iii) Records of each 15-minute block period for which an applicable combustion zone operating limit (*i.e.*, NHV_{ex} or LFL_{ex}) is not met for the MPGF when regulated material is being combusted in the flare. Indicate the date and time for each period, the NHV_{ex} and/or LFL_{ex} operating parameter for the period and the type of monitoring system used to determine compliance with the operating parameters (*e.g.*, gas chromatograph or calorimeter). For CP Chem's polyethylene plant MPGF, also indicate which HP stages were in use.

(iv) Records of when the pressure monitor(s) on the main flare header show the MPGF burners are operating outside the range of tested conditions or outside the range of the manufacturer's specifications. Indicate the date and time for each period, the pressure measurement, the stage(s) and number of MPGF burners affected, and the range of tested conditions or manufacturer's specifications.

(v) Records of when the staging valve position indicator monitoring system indicates a stage of the MPGF should not be in operation and is or when a stage of the MPGF should be in operation and is not. Indicate the date and time for each period, whether the stage was supposed to be open, but was closed or vice versa, and the stage(s) and number of MPGF burners affected.

Dated: June 1, 2017.

Stephen Page,
Director, Office of Air Quality Planning and Standards.

[FR Doc. 2017-12688 Filed 6-16-17; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL ELECTION COMMISSION

Sunshine Act Notice

AGENCY: Federal Election Commission.

DATE AND TIME: Thursday, June 22, 2017 at 10:00 a.m.

PLACE: 999 E Street NW., Washington, DC (Ninth Floor).

STATUS: This hearing will be open to the public.

ITEM TO BE DISCUSSED: *Audit Hearing:* Illinois Republican Party.

Individuals who plan to attend and require special assistance, such as sign language interpretation or other reasonable accommodations, should contact Dayna Brown, Secretary and Clerk, at (202) 694-1040, at least 72 hours prior to the hearing date.

PERSON TO CONTACT FOR INFORMATION: Judith Ingram, Press Officer, Telephone: (202) 694-1220.

Dayna C. Brown,
Secretary and Clerk of the Commission.

[FR Doc. 2017-12785 Filed 6-15-17; 11:15 am]

BILLING CODE 6715-01-P

FEDERAL RESERVE SYSTEM

Notice of Proposals To Engage in or To Acquire Companies Engaged in Permissible Nonbanking Activities

The companies listed in this notice have given notice under section 4 of the Bank Holding Company Act (12 U.S.C. 1843) (BHC Act) and Regulation Y, (12 CFR part 225) to engage *de novo*, or to acquire or control voting securities or assets of a company, including the companies listed below, that engages either directly or through a subsidiary or other company, in a nonbanking activity that is listed in § 225.28 of Regulation Y (12 CFR 225.28) or that the Board has determined by Order to be closely related to banking and permissible for bank holding companies. Unless otherwise noted, these activities will be conducted throughout the United States.

Each notice is available for inspection at the Federal Reserve Bank indicated. The notice also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether the proposal complies with the standards of section 4 of the BHC Act.

Unless otherwise noted, comments regarding the applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than July 3, 2017.

A. Federal Reserve Bank of Dallas (Robert L. Triplett III, Senior Vice President) 2200 North Pearl Street, Dallas, Texas 75201-2272:

1. *First Baird Bancshares, Inc.*, Weatherford, Texas; to acquire directly and indirectly voting shares of Sharp BancSystems, Inc., Bedford, Texas, and thereby engage in data processing activities pursuant to section 225.28(b)(14)(i) of Regulation Y.

Appendix A

Acronym List 123

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 125

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
40-36-1013	Unit 40 Catalyst Activator Heater	VOC	0.05	0.14	28, 33	28, 30, 33	28, 33
		CO	0.82	2.17			
		NOx	0.40	1.05			
		PM _{2.5}	0.07	0.20			
		PM ₁₀	0.07	0.20			
		PM	0.07	0.20			
		SO ₂	0.14	0.37			
40-36-1013	Unit 40 Catalyst Activator Heater MSS (7)	CO	4.24	----	17	15, 17, 22, 30	
		NOx	0.65	----			
40-36-1113	Unit 41 Catalyst Activator Heater	VOC	0.05	0.14	28, 33	28, 30, 33	28, 33
		CO	0.82	2.17			
		NOx	0.40	1.05			
		PM _{2.5}	0.07	0.02			
		PM ₁₀	0.07	0.02			
		PM	0.07	0.02			
		SO ₂	0.14	0.37			
40-36-1113	Unit 41 Catalyst Activator Heater MSS (7)	CO	4.24	----	17	15, 17, 22, 30	
		NOx	0.65	----			
40-35-1014A/B	Unit 40 HEPA Activator Filter	VOC	2.50	0.30	12	12, 30	
		PM _{2.5}	0.01	0.05			
		PM ₁₀	0.01	0.05			

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		PM	0.01	0.05			
40-35-1114A/B	Unit 41 HEPA Activator Filter	VOC	2.50	0.30	12	12, 30	
		PM _{2.5}	0.01	0.05			
		PM ₁₀	0.01	0.05			
		PM	0.01	0.05			
40-35-1018	Unit 40 Catalyst Fines Bag Filter	PM _{2.5}	0.01	<0.01	12	12, 30	
		PM ₁₀	0.01	<0.01			
		PM	0.01	<0.01			
40-35-1118	Unit 41 Catalyst Fines Bag Filter	PM _{2.5}	0.01	<0.01	12	12, 30	
		PM ₁₀	0.01	<0.01			
		PM	0.01	<0.01			
41-35-6201 41-35-6106	Unit 41 Extruder Feed Hopper Vent Filters (5)	VOC	0.60	----	4, 12, 28	4, 12, 28, 30	4, 28
		PM _{2.5}	0.02	0.08			
		PM ₁₀	0.02	0.08			
		PM	0.02	0.08			
40-35-6201 40-35-6106	Unit 40 Extruder Feed Hopper Vent Filters (5)	VOC	3.00	----	4, 12, 28	4, 12, 28, 30	4, 28
		PM _{2.5}	0.02	0.08			
		PM ₁₀	0.02	0.08			
		PM	0.02	0.08			
41-35-6310	Unit 41 Surge Hopper Filter	PM _{2.5}	0.02	0.08	12, 28	12, 28, 30	28
		PM ₁₀	0.02	0.08			

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		PM	0.02	0.08			
40-35-6310	Unit 40 Surge Hopper Filter	PM _{2.5}	0.02	0.08	12, 28	12, 28, 30	28
		PM ₁₀	0.02	0.08			
		PM	0.02	0.08			
41-25-6301	Unit 41 Pellet Dewatering Dryer (5)	VOC	6.00	----	28	28, 30	28
40-25-6300/6301	Unit 40 Pellet Dewatering Dryer (5)	VOC	12.00	----	28	28, 30	28
41-19-8040	Unit 41 Loadout Railcar Filters (5)	VOC	3.00	----	12	12, 30	
		PM _{2.5}	0.02	0.08			
		PM ₁₀	0.02	0.08			
		PM	0.02	0.08			
40-19-8040	Unit 40 Loadout Railcar Filters (5)	VOC	6.00	----	12	12, 30	
		PM _{2.5}	0.02	0.08			
		PM ₁₀	0.02	0.08			
		PM	0.02	0.08			
41-35-8011A/B/C	Unit 41 Pellet Silo Vent Filters (5)	VOC	3.00	----	4, 9, 12	4, 9, 12, 30	4
		PM _{2.5}	0.01	0.05			
		PM ₁₀	0.01	0.05			
		PM	0.01	0.05			

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
40-35-8011A/B/C	Unit 40 Pellet Silo Vent Filters (5)	VOC	6.00	----	4, 9, 12	4, 9, 12, 30	4
		PM _{2.5}	0.01	0.05			
		PM ₁₀	0.01	0.05			
		PM	0.01	0.05			
PVOC-CAP	Pellet VOC Cap	VOC	----	39.86	4, 9, 12	4, 9, 12, 30	4
MSS-EQUIP	Equipment Opening	VOC	4.98	0.25	17, 26	15, 16, 17, 25, 30	
MSS-MISC	Miscellaneous MSS	VOC	1.00	1.10	17, 18, 20, 26	15, 17, 18, 20, 25, 30	
MSS-LOAD	Waste Loading to Trucks	VOC	1.93	0.01	17, 19	15, 17, 19, 25, 30	
MSS-PM	Filter Replacement and Reactor Leg MSS	PM _{2.5}	<0.01	<0.01	26		
		PM ₁₀	0.06	<0.01			
		PM	0.13	0.11			
42-97-9610	Flare (9)	VOC	252.86	----	3, 4, 10, 27	3, 4, 10, 27, 30	3, 4
		CO	307.74	----			
		NOx	54.04	----			
		SO ₂	8.19	----			
42-97-9620	Vapor Destruction Unit (9)	VOC	5.16	----	4, 11, 27, 28, 34, 35	4, 11, 27, 28, 30, 34, 35	4, 28
		CO	134.91	----			
		NOx	26.48	----			
		SO ₂	5.51	----			
42-97-9610 & 42-97-9620	Flare & Vapor Destruction Unit (9)	VOC	----	25.80	4, 10, 27, 11	4, 10, 11, 27, 30	4, 10, 11
		CO	----	95.31			
		NOx	----	18.70			

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
		SO ₂	----	1.58			
42-97-9820	Wastewater API Separator	VOC	7.48	0.94	Project 179322, 06/22/2012, Pg. A-6		
TK-01	Locomotive Engine Tank	VOC	0.49	<0.01	Project 265867, 02/21/2017, Table A-5		
42-95-0421	Fresh 1-Hexene Tank	VOC	0.35	0.91	3, 7	3, 7, 30	3, 7
42-95-0422	Fresh 1-Hexene Tank	VOC	0.35	0.89	3, 7	3, 7, 30	3, 7
DG-01	Degreaser 1	VOC	0.03	0.03	Project 179322, 06/22/2012, Pg. A-7		Project 179322, 06/22/2012, Pg. A-7
DG-02	Degreaser 2	VOC	0.03	0.03	Project 179322, 06/22/2012, Pg. A-7		Project 179322, 06/22/2012, Pg. A-7
DG-03	Degreaser 3	VOC	0.03	0.03	Project 179322, 06/22/2012, Pg. A-7		Project 179322, 06/22/2012, Pg. A-7
SAND-01	Rail Repair Sandblasting	PM _{2.5}	0.03	<0.01	24	24, 30	
		PM ₁₀	0.03	<0.01			
		PM	0.23	<0.01			
42-05-9201	Cooling Tower	VOC	0.84	1.58	13	13, 30	
		PM _{2.5}	0.87	3.82			
		PM ₁₀	3.05	13.38			
		PM	3.05	13.38			
FUG-01	Fugitive Emissions (6)	VOC	4.63	20.29	3, 4, 5	3, 4, 5, 30	3, 4, 5

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
EMG-ENG 1	Emergency Generator Engine (8)	VOC	0.18	----	35	35	
		CO	0.52	----			
		NOx	8.07	----			
		PM _{2.5}	0.08	----			
		PM ₁₀	0.08	----			
		PM	0.08	----			
		SO ₂	1.55	----			
EMG-ENG 2	Emergency Generator Engine (8)	VOC	0.18	----	35	35	
		CO	0.52	----			
		NOx	8.07	----			
		PM _{2.5}	0.08	----			
		PM ₁₀	0.08	----			
		PM	0.08	----			
		SO ₂	1.55	----			
EMG-ENG 3	Emergency Generator Engine (8)	VOC	0.18	----	35	35	
		CO	0.52	----			
		NOx	8.07	----			
		PM _{2.5}	0.08	----			
		PM ₁₀	0.08	----			
		PM	0.08	----			
		SO ₂	1.55	----			
		VOC	----	0.02			

Major NSR Summary Table

Permit Numbers: 103832 and N166M1					Issuance Date: October 25, 2018		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Conditions/ Application Information	Special Conditions/ Application Information	Special Conditions/ Application Information
EMG-ENG 1, 2, 3	Emergency Generator Engines (8)	CO	----	0.04	35	35	
		NOx	----	0.63			
		PM _{2.5}	----	<0.01			
		PM ₁₀	----	<0.01			
		PM	----	<0.01			
		SO ₂	----	0.12			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NOx - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
 SO_x - sulfur oxides
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Annual VOC emissions for this source are authorized under the Pellet VOC Cap (EPN PVOC-CAP).
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) MSS annual emissions included in routine.
- (8) 3 emergency engines are authorized and are represented to operate up to 52 hours each per year with a combined total power output total of 1.5 MW and annual emission cap.
- (9) Flare and Vapor Destruction Unit emissions combined on an annual basis.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Chevron Phillips Chemical Company LP
Authorizing the Construction and Operation of
Polyethylene Production Units
Located at Sweeny, Brazoria County, Texas
Latitude 29° 4' 30" Longitude -95° 44' 48"

Permits: 103832 and N166M1

Revision Date: October 25, 2018

Expiration Date: August 8, 2023



For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]¹
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Number 103832 and N166M1

Emission Standards

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to the atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with exception for safety relief valves that discharge to the atmosphere as a result of fire, malfunction, or failure of utilities provided that:
 - A) Each valve is equipped with a rupture disc upstream,
 - B) A pressure-sensing device is installed between the relief valve and rupture disc to monitor disc integrity, and
 - C) All leaking discs are replaced at the earliest opportunity but no later than the next process shutdown.

Federal Program Applicability

3. These facilities shall comply with all applicable requirements of the U. S. Environmental Protection Agency (U.S. EPA) regulations on Standards of Performance for New Stationary Sources promulgated for Volatile Organic Liquid Storage Vessels, VOC Emissions, and Polymer Manufacturing in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts A, Kb, and DDD.
4. These facilities shall comply with all applicable requirements of the U.S. EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories from the Miscellaneous Organic Chemicals Manufacturing Industry (MON) promulgated for process vents, storage vessels, transfer operations, wastewater, and equipment leaks in 40 CFR Part 63, Subparts A and FFFF.

Leak Detection and Repair Monitoring Program

5. Piping, Valves, Pumps, Agitators, and Compressors - Intensive Directed Maintenance in VOC or HAP Service - 28LAER-

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs F and G shall not apply:
 - (i) Where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68 degrees Fahrenheit (°F); or
 - (ii) Operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure.

Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (i) Piping and instrumentation diagram (PID);
 - (ii) A written or electronic database or electronic file;
 - (iii) Color coding;
 - (iv) A form of weatherproof identification; or
 - (v) Designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

In lieu of the monitoring frequency specified above, connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of connectors leaking used in paragraph B shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

- Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
- Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe to monitor connectors.
- Cp = the percentage of leaking connectors for the monitoring period.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

- (i) A cap, blind flange, plug, or second valve must be installed on the line or valve; or
- (ii) The open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Non accessible valves shall be monitored by leak-checking for fugitive emissions at least annually using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a

minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.
- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown, equipment clearing and startup as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I) or 500 pounds whichever is greater, the Texas Commission on Environmental Quality (TCEQ) Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.
- I. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.
- K. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- L. The percent of valves leaking used in paragraph K shall be determined using the following formula:

$$(Vl + Vs) \times 100/Vt = Vp$$

Where:

- VI = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- Vs = the number of valves for which repair has been delayed and are listed on the facility shutdown log.
- Vt = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe to monitor valves.
- Vp = the percentage of leaking valves for the monitoring period.
- M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.
- N. Initial component identification and monitoring shall occur within 180 days of initial startup.

Carbon Compound Waste Streams

6. Except as may be provided for in the special conditions of this permit, all waste gas from point sources containing VOC and/or other organic compounds (hydrocarbons and/or hydrocarbon derivatives excluding carbon dioxide) shall be routed to the permitted flare (EPN 56.28-97-9610). The flare shall operate in accordance with Special Condition No. 10 when disposing of the carbon compounds captured by the collection system. The waste gas streams shall include process vents, relief valves, analyzer vents, steam jet exhausts, upset emissions, start-up and shutdown-related emissions or purges, blowdowns, or other system emissions of waste gas.

The following facilities and waste streams are excluded from this requirement:

- A. Storage tank vents, wastewater streams, cooling tower exhaust, and process fugitive emissions.
- B. During the regeneration process, the fourteen (14) treater (two ethylene, two hexene, four recycle isobutane, four olefin free isobutane, and two de-ethanizer overhead treaters) waste streams shall be routed to the vapor destruction unit (VDU) (EPN 42-97-9620) which is operated in accordance with Special Condition No. 11.
- C. Any other exception to this condition requires prior review and approval by the TCEQ Executive Director, and such exceptions may be subject to strict monitoring requirements. (10/2015)

Storage and Loading of VOC

7. The control requirements specified in paragraphs A.-D. of this condition shall not apply: where the VOC has an aggregate partial pressure of less than 0.5 psia at the maximum expected operating temperature; or to storage tanks smaller than 25,000 gallons. Paragraphs A-H do not apply to pressure vessels or to tanks equipped with vapor recovery systems.
- A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
- (i) A liquid-mounted seal,
 - (ii) Two continuous seals mounted one above the other, or
 - (iii) A mechanical shoe seal.
- Installation of equivalent control requires prior review and approval by the Executive Director of the TCEQ.
- B. An open-top tank containing a floating roof (external floating roof tank) which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal, and the secondary seal is rim-mounted. A weather-shield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.
- C. For any tank equipped with a floating roof, the holder of this permit shall follow 40 CFR § 60.113b, Testing and Procedures, to verify seal integrity. Additionally, the permit holder shall follow 40 CFR § 60.115b, Reporting and Recordkeeping Requirements, to provide records of the dates seals were inspected, seal integrity, and corrective actions taken.
- D. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650, or an equivalent degree of flotation, except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- E. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks without a floating roof must be equipped with permanent submerged fill pipes.
- F. For purposes of assuring compliance with VOC emission limitations, the holder of this permit shall maintain a monthly emissions record which describes calculated emissions of VOC from all storage tanks and loading operations. The record shall include tank or loading point identification number, control method used, tank or vessel capacity in gallons, name of the material stored or loaded, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, and VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures. These records shall be maintained at the plant site for at least two years and be made available to representatives of the TCEQ upon request.

- G. If throughput records are specified in the special conditions of this permit, the holder of this permit may keep such records in lieu of the records required in paragraph F.
- Emissions for tanks and loading operations shall be calculated using:
- (i) AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids"; and
 - (ii) The TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
- H. Operation without visible liquid leaks or spills shall be maintained at all loading/unloading facilities, regardless of vapor pressure. This does not apply to momentary dripping associated with the initial connection or disconnection of fittings. Sustained dripping from fittings during loading/unloading operations is not permitted. Any liquid spill that occurs during loading/unloading activities shall be reported pursuant to 30 TAC §§ 101.201, 101.211, and 101.221 and shall be cleaned up immediately to minimize air emissions.

Operational Parameters

8. Fuel for combustion devices at this facility is limited to sweet natural gas containing no more than 0.25 grain of hydrogen sulfide and 5 grains of total sulfur per 100 dscf.
9. Total VOC emitted to the atmosphere after the extruder through product loadout shall not exceed 50 pounds of VOC/million (MM) pounds of polyethylene pellets on a 12-month rolling basis. For Unit 40 this includes emissions after the scalping screen (EPNs 40-35-8011A-D) and railcar loadout (EPNs 40-19-8044A-D, 40-19-8054A-D, 40-19-8064A-D, and 40-19-8074A-D). For Unit 41 this includes emissions after the scalping screen (EPN 41-35-8011A-D) and railcar loadout (EPNs 41-19-8044A-D, 41-19-8054A-D, 41-19-8064A-D, and 41-19-8074A-D).
10. Flares shall be designed and operated in accordance with the following requirements:
- A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions or an alternate approved by the EPA.
 - B. The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office (or is required per NSPS Subpart) to demonstrate compliance with these requirements.
 - C. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
 - D. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
 - E. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition (total VOC or Btu content) to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.
 - F. The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through

October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12 month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes. (n/a if calorimeter used) Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit application (PI-1 dated June 19, 2012).

11. The VDU shall be designed and operated in accordance with the following requirements:

- A. The VDU shall achieve 99% control of the waste streams from one or more of the fourteen (14) treaters (two ethylene, two hexene, four recycle isobutane, four olefin free isobutane, and two de-ethanizer overhead treaters) directed to it during the regeneration process. The VDU system shall be designed and operated such that the combined assist natural gas and waste stream must be a minimum of 300 BTU/scf under normal and maintenance flow conditions.
- B. Quality assured (or valid) data must be generated when the VDU is operating except during the performance of a daily zero and span check and calibration. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VDU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
- C. The VDU shall be operated in compliance with the opacity limitations of §111.111(a)(1)(B) during all times when a waste stream is directed to it. An observation of opacity from the VDU shall be conducted in accordance with §111.111(a)(1)(F) while the control device is operating, and occur at least once during each calendar quarter unless the VDU does not operating for the entire quarter.
- D. The VDU shall have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated or have a calibration check performed at a frequency in accordance with, the manufacturer's specifications.
- E. The permit holder shall install a continuous flow monitor and composition analyzer that provide a record of the vent stream flow and composition (total VOC, N₂ and Btu content) to the VDU.
 - (i) The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the VDU inlet such that the total vent stream is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

- (ii) The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg;
 - (iii) Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9.
 - (iv) The monitors and analyzers shall operate as required by this section at least 95% of the time when the VDU is operational, averaged over a rolling 12 month period.
 - (v) Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit amendment application (PI-1 dated January 27, 2015). (10/2015)
12. Particulate matter emissions shall not exceed 0.01 grain per dry standard cubic foot (dscf) of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method 22.
- A. The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents shall be inspected for visible emissions once per day, and a spare parts filter inventory shall be maintained on site. All inspections and maintenance performed shall be recorded. When there are visible emissions from any one filtered vent, the operation associated with that particular filtered vent shall be isolated and shut down in a timely and orderly manner. The isolated filter system shall be tested and inspected. Failed or damaged parts shall be repaired or replaced.
 - B. The pressure in each baghouse that vents to the atmosphere shall be continuously monitored and recorded at least once an hour. In consideration of operational factors including results of the daily inspections required by Paragraph A., the permit holder may determine for each baghouse the pressure values that would indicate operational failure resulting in emissions of particulate matter to the atmosphere. When available, these pressure values may be used in lieu of the daily inspections as indicators of baghouse operational failure. The list of baghouses and their respective failure pressures shall be maintained in the facility record on-site and made available to the TCEQ upon request.
 - C. Each pressure monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure or 0.5 percent of span (1 inch water gauge pressure or 2% of span for scrubbers and cyclones).
 - D. Quality assured (or valid) data must be generated when the (facility generating emissions) is operating except during the performance checks. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the facility generating emissions operated over the

previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

Cooling Towers

13. The VOC associated with cooling tower water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

The monitoring method and calculation in 30 TAC Chapter 115, Subpart H, Division 2 can be used as an acceptable alternative.

Cooling water shall be sampled once a week for total dissolved solids (TDS). Dissolved solids in the cooling water drift are considered to be emitted as PM10/PM2.5. The data shall result from collection of water samples from the cooling tower and represent the water being cooled in the tower. Water samples should be capped upon collection, and transferred to a laboratory area for analysis. The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. The analysis method for Conductivity shall be ASTM D1125-95A and SM2510 B. Use of an alternative method shall be approved by the TCEQ Regional Director prior to its implementation. **(12/2014)**

Whenever a cooling tower leak is detected resulting in unauthorized emissions, action shall be taken as soon as possible to locate the leak. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit where the leak occurs and no later than one year from the date on which the leak is first detected. The cause of any leak and all repairs shall be recorded.

Maintenance, Start-Up and Shutdown Operations

14. Planned startup and shutdown emissions due to the activities identified in Special Condition 15 are authorized by this permit from facilities and emission points identified in this permit's MAERT, in Attachments A, B, C, or in Special Condition 21 of this permit.
15. This permit authorizes emissions from the following facilities used to support planned MSS activities (Attachments A, B, C) at permanent site facilities: frac tanks, containers, vacuum trucks, facilities used for abrasive blasting, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in Attachment C, and (c) does not operate as a replacement for an existing authorized facility.

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated

using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

16. Process units and facilities, with the exception of those identified in Special Conditions 18, 20 and Attachment A shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
 - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
 - C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
 - D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall

not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

- (i) For MSS activities identified in Attachment B, the following option may be used in lieu of (ii) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
- (ii) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 17. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

- E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:
- (i) It is not technically practicable to depressurize or degas, as applicable, into the process.
 - (ii) There is not an available connection to a plant control system (flare).
 - (iii) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Paragraph E. of this condition must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.

17. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.
- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:
- (i) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate response factor shall be recorded.

- (ii) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.
 - B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
 - (i) The air contaminant concentration measured is less than 80 percent of the range of the tube. If the maximum range of the tube is greater than the release concentration defined in (iii), the concentration measured is at least 20 percent of the maximum range of the tube.
 - (ii) The tube is used in accordance with the manufacturer's guidelines.
 - (iii) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:
$$\text{measured contaminant concentration (ppmv)} < \text{release concentration}$$

Where the release concentration is:

$$10,000 * \text{mole fraction of the total air contaminants present that can be detected by the tube.}$$

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.
 - C. Lower explosive limit measured with a lower explosive limit detector.
 - (i) The detector shall be calibrated monthly with a certified propane gas standard at 25% of the lower explosive limit (LEL) for propane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (ii) A daily functionality test shall be performed on each detector using the same certified gas standard used for calibration. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
 - (iii) A certified methane, ethylene, or pentane gas standard equivalent to 25% of the LEL for propane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.
18. This permit authorizes emissions from EPN MSS-MISC for the storage tanks identified in the attached facility list during planned floating roof landings. Tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application. Emissions from change of service tank landings, for which the tank is not cleaned and degassed, shall not exceed 10 tons of VOC in any rolling 12 month period. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.
- A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This requirement does not apply where the vapor under a floating roof is routed to control or a controlled recovery system during this process.

- B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 24 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under landed roofs shall be completed as follows:
- (i) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
 - (ii) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (iii) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 17.
 - (iv) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
 - (v) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- C. The tank shall not be opened or ventilated without control, except as allowed by (i) or-(ii) below in part D until one of the criteria in part D of this condition is satisfied.
- Minimize air circulation in the tank vapor space.
- (i) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
 - (ii) Access points shall be closed when not in use
- D. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
- (i) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture

remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.

- (ii) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
 - (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A, Appendix 1.
 - (b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
 - (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 16.
- (iii) No standing liquid verified through visual inspection.

The permit holder shall document the method (i)-(iii) used to determine that uncontrolled ventilation criteria were satisfied.

- E. Tanks shall be refilled as rapidly as practicable until the roof is off its legs, with the following exceptions:
 - (i) Only one tank with a landed roof can be filled at any one time, at a rate not to exceed 400 gallons per minute (gpm).
 - (ii) The vapor space below the tank roof is directed to a control device when the tank is re-filled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled must exit through the control device.
- F. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
 - (i) The identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;
 - (ii) The reason for the tank roof landing;
 - (iii) For the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
 - (a) The roof was initially landed,
 - (b) All liquid was pumped from the tank to the extent practical,
 - (c) Start and completion of controlled degassing, and total volumetric flow,
 - (d) All standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
 - (e) If there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,

- (f) Refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
 - (g) Tank roof off supporting legs, floating on liquid;
 - (4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.
- 19. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
 - A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
 - (i) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
 - (ii) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - (iii) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a "duckbill" or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 16.A or B.
 - C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.
 - E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in paragraphs A. through D. of this condition do not apply.

20. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
- A. The exterior surfaces of vessels exposed to the sun shall be white or aluminum effective May 1, 2013. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.
 - B. The vessels must be covered and equipped with fill pipes that discharge within 6 inches of the vessel bottom.
 - C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
 - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
 - E. If the vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.
21. Additional occurrences of MSS activities authorized by this permit (see Attachment A, B, and C) may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.
22. All permanent facilities must comply with all applicable operating requirements, limits, and representations in this permit during planned startup and shutdown unless alternate requirements and limits are identified. Alternate requirements for emissions from routine emission points are identified below.
- A. Combustion units, with the exception of flares, at this site are exempt from NO_x and CO operating requirements identified in special conditions in other NSR permits during planned startup and shutdown if the following criteria are satisfied.
 - (i) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.
 - (ii) The startup period does not exceed 8 hours in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.
 - (iii) Control devices are started and operating properly when venting a waste gas stream.
 - B. A record shall be maintained indicating the start and end times at which each of the activities identified above occur and documentation that the requirements for each have been satisfied.
23. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through the plant flare system meeting the requirements contained in Special Condition 10 of this permit.

24. No visible emissions shall leave the property due to abrasive blasting. Black Beauty and Garnet Sand may be used for abrasive blasting. The permit holder may also use blast media that meet the criteria below:
- A. The media shall not contain asbestos or greater than 1.0 weight percent crystalline silica.
 - B. The weight fraction of any metal in the blast media with a short term effects screening level (ESL) less than 50 micrograms per cubic meter as identified in the most recently published TCEQ ESL list shall not exceed the $\text{ESL}_{\text{metal}}/1000$.
 - C. The MSDS for each media used shall be maintained on site.
- Blasting media usage and the associated emissions shall be recorded each month and the rolling 12 month total emissions updated.
25. With the exception of the MAERT emission limits, these permit conditions become effective 180 days after this permit has been issued. During this period, monitoring and recordkeeping shall satisfy the requirements of Paragraphs A. through D. of Special Condition No. 15 of this permit. Emissions shall be estimated using good engineering practice and methods to provide reasonably accurate representations for emissions. The basis used for determining the quantity of air contaminants to be emitted shall be recorded. The permit holder may maintain abbreviated records of emissions from Attachment A and B activities as allowed in Special Condition 15 rather than documenting all the information required by its Paragraphs A. through D.
26. Planned maintenance activities must be conducted in a manner consistent with good practice for minimizing emissions, including the use of air pollution control equipment, practices and processes. All reasonable and practical efforts to comply with Special Conditions 14 through 26 must be used when conducting the planned maintenance activity, until the commission determines that the efforts are unreasonable or impractical, or that the activity is an unplanned maintenance activity.

Compliance Assurance Monitoring (CAM) Requirements

27. The following requirements apply to waste gas capture systems for the Flare (EPN 56.28-97-9610) and VDU (EPN 28-97-9620).
- A. If the control device does not have a bypass, comply with either of the following requirements:
 - (i) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - (ii) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - B. If there is a bypass for the control device, comply with either of the following requirements:
 - (i) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly to the atmosphere or
 - (ii) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

Equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines are not considered bypasses, a deviation shall be reported if the monitoring or inspections indicate bypass of the control device.

- C. If any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Records of the inspection, monitoring, and corrective action shall be maintained and kept at the site and made available to TCEQ representatives upon request. **(10/2015)**

Initial Determination of Compliance

28. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Catalyst Activator Heater vents (EPNs 40-36-1013, 40-36-1113), Extruder Feed Hopper vents (EPNs 41-35-6201, 40-35-6201), Pellet Dewatering Dryers (EPNs 40-25-6301, 41-25-6301), Surge Hopper Filters (EPNs 41-35-6310, 40-35-6310) and Vapor Destruction Unit (EPN 42-97-9620) to demonstrate compliance with the MAERT limits for the contaminants listed in Section B of this condition. Testing for the VDU must also demonstrate compliance with the represented VOC destruction rate effectiveness. **(10/2018)**

The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

Requests to waive testing for any pollutant or control device specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. As appropriate, any test waivers or alternate procedures must also comply with 30 Texas Administrative Code, Subchapter 115, §115.725 (relating to Highly Reactive Volatile Organic Compounds, Monitoring and Testing Requirements). Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
- (i) Proposed date for pretest meeting.
 - (ii) Date sampling will occur.
 - (iii) Name of firm conducting sampling.
 - (iv) Type of sampling equipment to be used.
 - (v) Method or procedure to be used in sampling.
 - (vi) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (vii) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from the Catalyst Activator Heater vents (EPNs 40-36-1013, 40-36-1113) to be tested for are NO_x and CO. Air contaminants emitted from the Extruder Feed Hopper Vent Filters (EPNs 41-35-6201, 40-35-6201), Pellet Dewatering Dryers

(EPNs 41-25-6301, 40-25-6301, 40-25-6300), and Surge Hopper Filters (EPNs 41-35-6310, 40-35-6310) to be tested for are VOCs. Air contaminants emitted from the Vapor Destruction Unit (EPN 42-97-9620) to be tested for are NO_x, CO, and VOCs. Testing for additional air contaminants not specified in this section may be required by the appropriate TCEQ regional office. **(10/2018)**

- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities or increase in production, and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate at maximum polyethylene production and heater firing rates during stack emission testing. These conditions/ parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/ parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the polyethylene production rate or the catalyst activation heater firing rate is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
 - One copy to the appropriate TCEQ Regional Office.
 - One copy to each local air pollution control program.
- F. Sampling ports and platforms shall be incorporated into the design of the facility being sampled according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director. **(10/2018)**

Ongoing Determination of Compliance

- 29. Ongoing compliance with VOC emission limits for the polyethylene pellet handling systems between each extruder and product loadout (inclusive) shall be determined by calculation using monthly production rates and monthly average VOC concentrations derived as results of sampling the polyethylene products for residual VOC at the following two locations:

- (A) At the scalping screen after the dryer; and
- (B) At final product loading.

An acceptable head space test for VOC shall be used to determine the residual VOC at each location. Monthly average results shall be based on a minimum of three samples at each location. Separate samples are required for each product type produced during the month.

The permit holder may develop an average value of "lb VOC/MM lb product" for each product type. The average value of this parameter for each product type shall be derived from no less than 10 sample sets at each of locations (A) and (B) specified above, with each set comprised of no less than 3 individual samples.

When available upon derivation as indicated, the average value may be used in lieu of the monthly sampling schedule and its results to demonstrate compliance with applicable VOC emission rate limits.

For each product in production, the average value shall be verified on a quarterly basis by the indicated derivation methods and sample sizes.

Polymer production rates, types and monitoring records will be maintained at the plant site and shall include (but are not necessarily limited to):

- A. Day and time of sample
- B. Actual plant production rate at the time of sampling
- C. Monthly production rate
- D. Product number
- E. Polymer handling emissions calculated as concentration (A) - concentration (B) multiplied by monthly production

Recordkeeping Requirements

30. All records required by the conditions of this permit shall be kept at the plant site for a minimum of two years and made available to TCEQ representatives upon request. Monthly production shall be recorded to indicate the pounds of polyethylene produced year-to-date. The monthly average pounds of VOC per MM pounds of product resulting from the headspace tests shall be recorded each month.

The following requirements apply to these PM filter systems (EPN's 40-35-1014, 41-35-1014, 41-35-1018, 40-35-1118, 41-35-6201, 40-35-6201, 41-35-6310, 40-35-6310, , 41-19-8044A-D, 41-19-8054A-d, 41-19-8064A-D, 41-19-8074A-D, 40-19-8044A-D, 40-19-8054A-D, 40-19-8064A-D, 40-19-8074A-D, 41-35-8011A-D, 40-35-8011A-D):

- A. An observation of visible emission from stationary vents units which are required to comply with 30 TAC 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter. Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset.
- B. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- C. Records of all observations shall be maintained and kept at the site, and made available to TCEQ representatives upon request.

Offsets for Emissions Increases Initial Nonattainment New Source Review (NNSR) permit

31. The initial Nonattainment New Source Review (NNSR) permit was based on the use of 119.4 tons per year (tpy) of volatile organic compound (VOC) emission reduction credits (ERC) from ERC certificates 2703 and 2706 owned by the permit holder. The 119.4 tpy of VOC ERCs provide offsets at the ratio of 1.3 to 1 for 91.82 tpy of VOC emissions authorized by the initial permit as a project increase. **(10/2015)**
32. The initial NNSR permit is issued based on the permanent retirement of 14.4 tpy of NOx ERCs from ERC certificates owned by the permit holder. The 14.4 tpy of NOx ERCs provide offsets at the ratio of 1.3 to 1 for 11.04 tpy of NOx emissions authorized by this permit as a project increase from the following facility: **(10/2015)**

ERC Facilities:

EPN 42-97-9610: Flare	11.04 tpy
ERC Project Increase:	11.04 tpy

NNSR Offsets Requirement

(1.3:1 total required)	14.4 tpy
(0.3:1 portion)	3.31 tpy
Total NOx ERC Requirement:	14.4 tpy

33. For the following facilities subject to the Mass Emission Cap and Trade (MECT) program in the HGB nonattainment area, the permit holder must satisfy the indicated NOx offset requirement with MECT allowances for the initial permit issuance:

MECT Facilities

EPN 40-36-1112: Catalyst Activator Heater #1	1.05 tpy
EPN 40-36-1113: Catalyst Activator Heater #2	1.05 tpy
EPN EMG-ENG 1, 2, 3: Emergency Generator Engines	0.26 tpy

MECT Project Increase:	2.36 tpy
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NNSR Offsets Requirement

(1.3:1 total required)	3.10 tpy
(0.3 portion)	0.71 tpy
Total MECT Allowance Requirement:	3.1 tpy

- A. To satisfy the "1.0" portion of the 1.3 to 1 offset requirement for the project increase of NOx emissions from facilities subject to the MECT program, the permit holder shall permanently set aside 2.4 tpy of MECT allowances in the site's compliance account. At the end of each control period, all allowances set aside as offsets shall be deducted from the site's compliance account
- B. To satisfy the "0.3" portion of the 1.3 to 1 offset requirement for the project increase of NOx emissions from facilities subject to the MECT program, the permit holder shall permanently retire 0.7 tpy of MECT allowances.
- C. The permit holder shall submit applications to the TCEQ Emissions Banking and Trading Program (EBTP) to set aside MECT allowances for the use of "1.0" portion and retire allowances for the "0.3" portion of the NOx emissions offset requirement at least 30 days before the start of operation of the affected facilities. EBTP shall verify this use of these allowances.

- D. If MECT allowances devalue due to future regulatory changes, the permit holder must submit an application to EBTP at least 30 days before the shortfall to revise the amount of allowances set aside for offsets.
(10/2015)

Offsets for Emissions Increases for the 1st Major Modification of the NNSR permit

34. The first major modification (M1) of the NNSR permit is based on a permanent retirement of 1.0 tpy of VOC ERC from ERC certificates owned by the permit holder and provide offsets at the ratio of 1.3 to 1 for 0.8 tpy VOC emissions authorized for EPN 42-97-9620, VDU under the modification project as increases. **(10/2015)**
35. The modified NNSR permit is issued based on the permanent retirement of 10.4 tpy of NO_x ERCs from ERC certificates owned by the permit holder. The 10.4 tpy of NO_x ERCs provide offsets at the ratio of 1.3 to 1 for 8.0 tpy of NO_x emissions authorized by this modified permit as a project increases:

ERC Facilities:

EPN 42-97-9620: VDU	7.66 tpy
EPN EMG-ENG 1, 2, 3: Emergency Generator Engines	0.37 tpy
ERC Project Increase:	8.03 tpy

NNSR Offsets Requirement

(1.3:1 total required)	10.4 tpy
(0.3:1 portion)	2.40 tpy

Total NO _x ERC Requirement:	10.4 tpy
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(10/2015)

Date: October 25, 2018

Permit No. 103832, N166M1
 Attachment A
 INHERENTLY LOW EMITTING ACTIVITIES

<u>Activity</u>	<u>Emissions</u>				
	<u>VOC</u>	<u>NOx</u>	<u>CO</u>	<u>PM</u>	<u>H₂S/ SO₂</u>
Management of sludge from pits, ponds, sumps, and water conveyances	x				
Aerosol Cans	x				
Calibration of analytical equipment	x	x	x		x
Carbon can replacement	x				
Catalyst charging/handling				x	
Instrumentation/analyzer maintenance	x				
Meter proving	x				
Replacement of analyzer filters and screens	x				
Maintenance on water treatment systems (cooling, boiler, potable)	x				
Soap and other aqueous based cleaners	x				
Cleaning/maintaining sight glasses	x				
Hydroblast slab activities	x				

Date: August 8, 2013

Permit No. 103832, N166 M1
Attachment B
ROUTINE MAINTENANCE ACTIVITIES

Pump repair/replacement
Fugitive component (valve, pipe, flange) repair/replacement
Compressor repair/replacement
Heat exchanger repair/replacement
Vessel repair/replacement
Reactor Maintenance
Filter Maintenance
Dryer/Treater Maintenance
Instrumentation repair/replacement (> inherently low emitting sources)
Miscellaneous equipment repair/replacement (e.g. valves, piping, spools, specialty equipment)
Process vent system maintenance
Process vent routed to flare during unit outages
Alternate flash tank cleanout

Date: August 8, 2013

Permit No. 103832, N166 M1
Attachment C
MSS ACTIVITY SUMMARY

<u>Facilities</u>	<u>Description</u>	<u>Emissions Activity</u>	<u>EPN</u>
all process units	process unit shutdown/depressurize/drain	vent to flare	42-97-9610
all process units	process unit purge/degas/drain	vent to atmosphere	MSS-EQUIP
all process units	process unit startup	vent to flare	42-97-9610
all process units and tanks	preparation for facility/component repair/replacement	vent to flare	42-97-9610
all process units and tanks	preparation for facility/component repair/replacement	vent to atmosphere	MSS-EQUIP
all process units and tanks	recovery from facility/component repair/replacement	vent to flare	42-97-9610
all process units and tanks	recovery from facility/component repair/replacement	vent to atmosphere	MSS-EQUIP
all process units and tanks	preparation for unit turnaround or facility/component repair/replacement	remove liquid	MSS-LOAD 42-97-9820
all production-related	all production related facilities	painting	Authorized by PE
all floating roof tanks	tank roof landing	operation with landed roof	MSS-MISC
all floating roof tanks	degas of tank with landed roof	controlled degassing	MSS-MISC
all tanks	tank cleaning	cleaning activity and solvents	MSS-MISC
see Attachment A	miscellaneous low emitting activities	see Attachment A	42-97-9610 MSS-EQUIP
all production-related	abrasive blasting	PM from blasting media	SAND-01

Date: August 8, 2013

Emission Sources - Maximum Allowable Emission Rates

Permit Number 103832, N166M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
40-36-1013	Unit 40 Catalyst Activator Heater	VOC	0.05	0.14
		CO	0.82	2.17
		NO _x	0.40	1.05
		PM2.5	0.07	0.20
		PM10	0.07	0.20
		PM	0.07	0.20
		SO ₂	0.14	0.37
40-36-1013	Unit 40 Catalyst Activator Heater MSS (7)	CO	4.24	--
		NO _x	0.65	--
40-36-1113	Unit 41 Catalyst Activator Heater	VOC	0.05	0.14
		CO	0.82	2.17
		NO _x	0.40	1.05
		PM2.5	0.07	0.02
		PM10	0.07	0.02
		PM	0.07	0.02
		SO ₂	0.14	0.37
40-36-1113	Unit 41 Catalyst Activator Heater MSS (7)	CO	4.24	--
		NO _x	0.65	--
40-35-1014A/B	Unit 40 HEPA Activator Filter	VOC	2.50	0.30
		PM2.5	0.01	0.05
		PM10	0.01	0.05
		PM	0.01	0.05

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
40-35-1114A/B	Unit 41 HEPA Activator Filter	VOC	2.50	0.30
		PM2.5	0.01	0.05
		PM10	0.01	0.05
		PM	0.01	0.05
40-35-1018	Unit 40 Catalyst Fines Bag Filter	PM2.5	0.01	<0.01
		PM10	0.01	<0.01
		PM	0.01	<0.01
40-35-1118	Unit 41 Catalyst Fines Bag Filter	PM2.5	0.01	<0.01
		PM10	0.01	<0.01
		PM	0.01	<0.01
41-35-6201 41-35-6106	Unit 41 Extruder Feed Hopper Vent Filters (5)	VOC	0.60	--
		PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
40-35-6201 40-35-6106	Unit 40 Extruder Feed Hopper Vent Filters (5)	VOC	3.00	--
		PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
41-35-6310	Unit 41 Surge Hopper Filter	PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
40-35-6310	Unit 40 Surge Hopper Filter	PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
41-25-6301	Unit 41 Pellet Dewatering Dryer (5)	VOC	6.00	--
40-25-6300/6301	Unit 40 Pellet Dewatering Dryer (5)	VOC	12.00	--

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
41-19-8040	Unit 41 Loadout Railcar Filters (5)	VOC	3.00	--
		PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
40-19-8040	Unit 40 Loadout Railcar Filters (5)	VOC	6.00	--
		PM2.5	0.02	0.08
		PM10	0.02	0.08
		PM	0.02	0.08
41-35-8011A/B/C	Unit 41 Pellet Silo Vent Filters (5)	VOC	3.00	--
		PM2.5	0.01	0.05
		PM10	0.01	0.05
		PM	0.01	0.05
40-35-8011A/B/C	Unit 40 Pellet Silo Vent Filters (5)	VOC	6.00	--
		PM2.5	0.01	0.05
		PM10	0.01	0.05
		PM	0.01	0.05
PVOC-CAP	Pellet VOC Cap	VOC	--	39.86
MSS-EQUIP	Equipment Opening MSS	VOC	4.98	0.25
MSS-MISC	Miscellaneous MSS	VOC	1.00	1.10
MSS-LOAD	Waste Loading to Trucks	VOC	1.93	0.01
MSS-PM	Filter Replacement and Reactor Leg MSS	PM2.5	<0.01	<0.01
		PM10	0.06	<0.01
		PM	0.13	0.11

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
42-97-9610	Flare (9)	VOC	252.86	-
		CO	307.74	-
		NOx	54.04	-
		SO2	8.19	-
42-97-9620	Vapor Destruction Unit (9)	VOC	5.16	-
		CO	134.91	-
		NOx	26.48	-
		SO2	5.51	-
42-97-9610 & 42-97-9620	Flare & Vapor Destruction Unit (9)	VOC	-	25.80
		CO	-	95.31
		NOx	-	18.70
		SO2	-	1.58
42-97-9820	Wastewater API Separator	VOC	7.48	0.94
TK-01	Locomotive Engine Tank	VOC	0.49	<0.01
42-95-0421	Fresh 1-Hexene Tank	VOC	0.35	0.91
42-95-0422	Fresh 1-Hexene Tank	VOC	0.35	0.89
DG-01	Degreaser 1	VOC	0.03	0.03
DG-02	Degreaser 2	VOC	0.03	0.03
DG-03	Degreaser 3	VOC	0.03	0.03
SAND-01	Rail Repair Sandblasting	PM10	0.03	<0.01
		PM2.5	0.03	<0.01
		PM	0.23	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
42-05-9201	Cooling Tower	VOC	0.84	1.58
		PM2.5	0.87	3.82
		PM10	3.05	13.38
		PM	3.05	13.38
FUG-01	Fugitive Emissions (6)	VOC	4.63	20.29
EMG-ENG 1	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NOx	8.07	-
		PM2.5	0.08	-
		PM10	0.08	-
		PM	0.08	-
		SO2	1.55	-
EMG-ENG 2	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NOx	8.07	-
		PM2.5	0.08	-
		PM10	0.08	-
		PM	0.08	-
		SO2	1.55	-
EMG-ENG 3	Emergency Generator Engine (8)	VOC	0.18	-
		CO	0.52	-
		NOx	8.07	-
		PM2.5	0.08	-
		PM10	0.08	-
		PM	0.08	-
		SO2	1.55	-
EMG-ENG 1, 2, 3		VOC	-	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Emergency Generator Engines (8)	CO	-	0.04
		NOx	-	0.63
		PM2.5	-	<0.01
		PM10	-	<0.01
		PM	-	<0.01
		SO2	-	0.12

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM10 and PM2.5, as represented
PM10 - total particulate matter equal to or less than 10 microns in diameter, including PM2.5, as represented
PM2.5 - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
SO_x - sulfur oxides
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Annual VOC emissions for this source are authorized under the Pellet VOC Cap (EPN PVOC-CAP)
(6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(7) MSS annual emissions included in routine.
(8) 3 emergency engines are authorized and are represented to operate up to 52 hours each per year, with a combined total power output total of 1.5 MW and annual emission cap.
(9) Flare and Vapor Destruction Unit emissions combined on an annual basis.

Date: October 25, 2018